



THE THERAPY OF THE NEUROSES AND PSYCHOSES

*A SOCIO-PSYCHO-BIOLOGIC ANALYSIS
AND RESYNTHESIS*

BY

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PREFACE TO THE SECOND EDITION

THE second edition has been expanded by the inclusion of new material on the subject of Schizophrenia and by the addition of chapters on: the *Shock Therapies*; the *Organic Psychoses*; and *Neuropsychiatric States Induced by the War*. To provide space for the new material I have deleted the chapter on Psychoanalysis and Related Schools.

The entrance of the United States into World War II (since the first publication of this book) has served to focus our attention more sharply upon the causes and the effects of war. The thesis of this book is that man is an organic whole—a socio-psychobiologic unit—and not merely a collection of organs. In the same way, the world is an organic whole—a socio-pscho-economic unit; and the well-being of the Whole depends upon and determines the well-being of its constituent members.

The solution of social and economic problems must be left in large part to experts in those fields. But so closely interrelated as to be an essential component to these forces are those psychologic forces which we call the "attitudes" of men. Throughout this volume there has been the insistence that Man become mature, face his problems objectively, and avoid emotional thinking with its associated prejudices, hatreds, and fears. This insistence should apply not only to "neurotics and psychotics," as the title of this book might imply, but to the whole of Mankind, if we are to escape both the cataclysmic dangers of war and the equally disastrous, though less obvious, results of personal and social maladjustments.

Such an ideal—of maturity for the individual Man and the smoothly functioning and integrated welfare of Society—has, for centuries, been the professed goal of many great religions and systems of philosophical thought. Our hope for realization of such an ideal goal is, even in this very savage and barbaric struggle, brighter than ever before; for now as never before there is Conscious Realization among a steadily increasing number of common men that the way of personal happiness is that of self discipline and of self sacrifice for the common good.

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PREFACE TO THE FIRST EDITION

THE treatment of nervous and mental conditions is very frequently reserved for the specialist; but from one-third to three-quarters of the cases of the general practitioner or the non-psychiatric specialist are in need of psychotherapeutic as well as medical attention. This volume is intended to state as clearly and pragmatically as possible the factors underlying the formation of nervous and mental diseases and their treatment. It is believed that physicians other than psychiatrists will be able to make practical and valuable application of the principles of therapy herein discussed.

Contrary to the often held belief that psychiatry deals only with bizarre ideas and definitely "peculiar" persons, in reality, psychiatry takes as its province the entire realm of human thinking, feeling, and acting. The reader of this book will realize anew how indefinite is the line of demarcation between the normal and the neurotic, and will be impressed that psychoneurotic symptoms are to a large degree but an intensification of attitudes and reaction patterns common to us all. The earliest psychiatrists in everything but name were the writers, poets, and philosophers who analyzed and commented upon human actions in poems, plays, and stories. Every person who understands human actions and who attempts to correct or modify them is to a greater or less degree a psychiatrist.

However, science connotes an orderly and systematic body of knowledge; and psychiatry as a science had its first formalized statement when Emil Kraepelin culled out of the "general insanities" (vesania, moral insanity, etc.) the classifications which are still used in modern times. However, such a classification is relatively rigid, and cannot adequately interpret man who is consistently individualistic and variable. The second step in the science of psychiatry was made when Sigmund Freud brought forth in organized fashion the unconscious and the dynamic activity of human thought and emotions. All psychiatry today has been influenced by his dynamic concept. Freud, however, elaborated upon this basic concept a vast super-structure which many psychiatrists, including the author, regard as extremely fanciful. In this volume the author has made an attempt to separate the chaff

from the wheat, and to give as much of the school of psychoanalysis (limited by common consent to the school of Freud) as is of logical and practical value. The third step in the advancement of psychiatry came with the advent of the shock therapies. These shock therapies have given impetus to the general understanding of the physiologic nature of the body-mind, and to the specific nature of insanity. Much needs as yet to be learned about the nature of these therapies and their site of action; but the fact of their existence has proved a tremendous stimulus to the advance of our knowledge of man.

This book has been written to state not only some of the facts about man and the malady of his actions but to offer an interpretation of and a practical technique for meeting some of his problems. This book is an attempt at an orientation: an orientation which studies man as he is, in the social, psychologic, and biologic setting in which he is conceived and matured. The cases cited are taken from actual practice, and specific suggestions are made for the understanding of the illness and for the therapy thereof. The techniques cited offer specific and practical suggestions which can be used in most instances by most physicians.

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FOREWORD

SOME years ago an earnest and eager and self confident young physician started his contacts with psychiatric patients with obvious talent and devotion. Eminently sincere and anxious to learn, he never forgot to give himself as he was and as he felt and as he saw his opportunities in a true therapy of service—a pleonasm for therapy—and devotion to his cases. He reached and remained true to himself and his thought and he reached his students. And here he presents what he would like physicians to share with him. He has written a compend, personal but shareable, ringing true and helpful to both fellow worker and patient—a book which has arisen out of real life, and adaptable enough to encourage others to make their own working equally true to their and their patients' nature and needs. Its sincere and practical spirit puts critical theory into the background without sacrificing the search for the realities and the opportunities for service. May the spirit of the reader join that of the writer.

Adolf Meyer

TABLE OF CONTENTS

CHAPTER I

	PAGE
CLASSIFICATION OF THE PSYCHIATRIC STATES . . .	21
I. Relative role of reason and feeling tone in personality development.	
II. Personality disturbance in normal and in psychoneurotic persons.	
III. General Outline of Psychiatric Disease Processes.	
<i>Amentia</i> . Based on intellectual deficiency. Classifications: Idiocy. Imbecility. Mental Deficiency. <i>The Organic Psychoses</i> . Based on diffuse disturbance in function of cortex. Classifications: Infectious, toxic, and degenerative states of cortex. Symptoms. <i>The Constitutional Psychoses</i> . No demonstrable etiology. Classification: Manic Depressive Psychoses, Schizophrenia. <i>The Psychoses Associated with Other Organic Diseases</i> . <i>Psychopathic Personality</i> . Causes <i>vs.</i> Form. Categories: drug addiction, alcoholism, sex perversion, etc. <i>The Psychoneuroses</i> . Mechanism of Production of Neurotic Symptoms.	
IV. Necessity of distinguishing between cause and form of psychoses and neuroses.	
V. Psychoneurotic Symptoms. <i>Tension Symptoms</i> . General tension symptom expressed in irritability, anxiety states, worry, etc. Focal tension symptoms expressed in gastrointestinal, cardiac, and other physiologic disturbances. <i>Symbolic Symptoms</i> . Expressed in disturbances of sensory activity, motor activity, special senses, mental processes, etc. Hysterical aphonia. Astasia abasia. Obsessive ideas. Phobias, etc. <i>Combination of tension and symbolic symptoms</i> as seen in speech disorders: hoarseness, stammering, stuttering.	
VI. Table of neurotic symptoms.	

CHAPTER II

THE FUNDAMENTAL PSYCHOLOGY OF THE PSYCHONEUROSES .	45
I. Personality as a function of socio-psycho-biologic unity in a given setting at a given time. Interrelation of physiologic and psychologic reactions.	
II. Role of <i>drives</i> (Self preservation, race preservation) in the development of psychologic reactions. Effect of complex civilization in creating multitudinous, unrealizable and contradictory desires. <i>Resultant Conflict</i> .	
III. Habitual nature of reaction patterns. Advantages. Dangers.	
IV. Habitual nature of emotionally toned ideas. <i>Primitive thinking</i> characterized by laws of similarity and laws of contagion. Reversion, in the psychoses, to primitive thinking. Persistence of reaction patterns and attitudes.	
V. <i>Symbolization</i> . Usefulness of. Modifications: <i>Condensation</i> . <i>Displacement</i> . Dangers of condensation and displacement.	
VI. Importance of early environment. Communicability of conflict. Importance of emotional security. Effect of cultural and financial status, group associations, work, etc.	
VII. Role of socially imposed inhibitions in the development of tension. Religious teachings. Sex taboos.	

CHAPTER III

	PAGE
PSYCHONEUROTIC SYMPTOMS EXPRESSED PRIMARILY BY PSYCHOLOGIC FACTORS	56
I. Psychologic symptoms associated with physiologic symptoms and based in conflict and tension. Unimportance of symptoms <i>per se</i> . Typical symptoms: Inability to concentrate. Indecisiveness. Feeling in a daze. Inability to relax.	
II. <i>Mediating Mechanisms</i> (psychoneurotic symptoms): Ineffectual efforts to deal with conflictual situations. Background of <i>over-sensitivity</i> , arising from sense of <i>insecurity</i> and expressing itself in sense of <i>inadequacy</i> (inferiority complex), <i>over-emphasis</i> on existent difficulties, excessive <i>self consciousness</i> , and <i>self intolerance</i> , originating in frustration or unsolved conflict.	
III. Mediating mechanisms primarily <i>defensive</i> : <i>Repression</i> (dynamic forgetting); <i>Hypercriticism</i> ; <i>Grudge carrying</i> ; <i>Withdrawal</i> (either physical or psychologic); <i>Conversion</i> ; <i>Negativeness</i> ; <i>Rationalization</i> ; <i>Projection</i> ; <i>Identification</i> ; <i>Phantasy formation</i> with its frequent concomitant of <i>worry</i> and excessive fear of failure; <i>Dissociation</i> ; <i>Ambivalence</i> ; <i>Regression</i> ; <i>Irradiation</i> and its opposite <i>Convergence</i> .	
IV. Mediating mechanisms, primarily <i>attention getting</i> : temper tantrums, martyr attitudes, etc.	
V. Mediating Mechanisms, primarily <i>pleasure seeking</i> : <i>Sublimation</i> ; <i>Compensation</i> .	
VI. Universality of these mechanisms. Selectivity, intensity, and extensivity of their employment as norm by which to distinguish normal from neurotic.	

CHAPTER IV

PSYCHONEUROTIC (TENSION) SYMPTOMS DUE TO DISTURBANCES IN THE AUTONOMIC NERVOUS SYSTEM	85
I. Necessity for recognizing effect of emotion on physiologic function. Extensive use of hypnosis in experimental work.	
II. <i>Metabolism and Blood</i> . Heat regulation, calcium content, sugar metabolism, number of red and of white cells, etc., demonstrated to be in part dependent on subjective states.	
III. <i>Cardiovascular Signs of Emotion</i> . Interrelationship of heart and autonomic nervous system. Result for primitive man; result for civilized man. Increased heart rate. Extra systoles. Spasmodic aptitude. Blood pressure variations.	
IV. <i>Respiratory System and Oto-Rhino-Laryngology</i> . Breathing disturbances. Sighs. Hysterical aphonia. Asthma (psychic factors in). Table of interrelationship of psyche and respiration.	
V. <i>Gastrointestinal System</i> . Nervous dyspepsia. Effect of excitement on salivary secretion; on flow of bile. Globus hystericus. Cardiospasm. Peptic ulcer. Mucous colitis, constipation, etc., definitely affected by emotional disturbances.	
VI. <i>Genito-Urinary System and Gynecology</i> . Voluntary and involuntary bladder control. Tension resulting in frequency; hysteria resulting in retention. Enuresis, spermator-	

- rhea, and impotence: psychically conditioned. Correlation between presence of psychoses and menstruation anomalies. Amenorrhea and fear of pregnancy. Effect of hypnosis on menstrual disturbances and labor pains.
- VII. *Special Sense Organs*. Headaches: pressure on top of head; aching over occiput; tight band pressure—result of tension. Ophthalmologic complications in hysteria. Hysterical deafness, ear pains, etc. Psychic disturbances caused by impaired hearing. Skin diseases often expressive of psychologic disturbance; urticaria, edema, eczema. Pruritus, pallor, pathology in blushing, warts, etc.
- VIII. Conclusion: Oneness of organism. Emotion as a physiologic phenomenon.

CHAPTER V

SEX DRIVES 100

- I. Necessity for frank, objective understanding of sex. Sex maladjustments more obvious but not more important than others. Constructive and destructive expressions of restrained or thwarted sex drive.
- II. *Normal Sex Attitude and Practice*. Child's attitude. Information given determined by level of maturity. Matter of fact physiologic explanation. Normal masturbation rarely accompanied by phantasy. Value of physical and recreational activities. Desirability of knowledge of phenomenology of proper sex relations. Orgasm as nervous release of tension. Frequency of intercourse. Sex relationships as routine matter. Temporary maladjustments. Degrees of maladjustments.
- III. *Sex as a Tension Releasing Mechanism*. Use as pleasure substitute.
- IV. *Early Sex Maladjustments*. Excessive prudishness and over-exposure equally distorting. Sex trauma.
- V. *Masturbation*. Society's attitude. Frightening misinformation given to child. Feeling of guilt. Masturbation as tension release; as compensatory mechanism.
- VI. *Impotence*. Causes: *physical factors* (illness, fatigue, etc.). *Conflicting desires; fear; concern about masturbation; frigid wife; over-aggressiveness of female; conscience; concern about other matters*.
- VII. *Frigidity*. Partial. Complete. Causes: *Early training; unsatisfactory introduction into sex relationship; male precipitancy; fear of pregnancy; irritation over non-sexual factors; insufficient love making; improper coordination during coitus*.
- VIII. *Therapy of Sex Maladjustments*. Removal of cause, correction of attitudes. Explanations of masturbation and impotence. Premature ejaculation.
- IX. *Symptoms of Sex Frustration*. Irritability. Anxiety States, resulting from withdrawal method. Criticism, Nagging: all resulting from unreleased tension. *Sadism. Masochism*. Effect of alcoholism on sex expression.
- X. *Homosexuality*. Overt. Latent. Sense of conflict usual. Drives: Social, Constitutional, Psychosexual.
- XI. Conclusions: Constructive sublimation (exercise, social and recreational activities, work). Value of self-discipline.

CHAPTER VI

	PAGE
THE PRINCIPLES OF PSYCHOTHERAPY	123
I. Three-fold aim of psychotherapy: <i>to remove stress; to eliminate immature traits; to substitute mature, healthful reaction patterns.</i> Fallacy of treating symptoms as such.	
II. A <i>Socio-Psycho-Biologic Analysis.</i> Analysis of physical condition by examination. Psychotherapeutic value of thorough examination. Analysis of social pressures through consultation with patient, family, friends, etc. Analysis of psychologic aspects through discussion. Conscious and unconscious attitudes.	
III. A <i>Socio-Psycho-Biologic Resynthesis.</i> Simultaneous therapy of the three factors. Physical therapy to be specific. <i>Therapy of stress</i> by: removal of stress, removal from stress, advice on adjusting to stress. <i>Therapy of psychologic factors</i> by: making patient aware of attitudes to be changed; removing emotional tone; retraining. Necessity for persistent conscious effort. Short cut method of therapy.	
IV. <i>Technique of Analysis and Resynthesis.</i> Determining basic attitudes by direct discussion. Intellectual understanding of causes. Emotional acceptance. Conscious redirection of thought and action. Necessity for specificity. Avoidance of criticism.	
V. <i>Adjuvants</i> in breaking old and making automatic the new attitudes: Rapport; Drugs; Suggestion, Hypnosis.	

CHAPTER VII

TECHNIQUE OF ANALYSIS OF PERSONALITY DIFFICULTIES	138
I. Analysis and resynthesis of personality both an art and a science.	
II. Factors determining reaction patterns: <i>stress; inherited constitutional pattern; environmental forces.</i> Variation in time required to determine basic causes.	
III. <i>Direct Discussion.</i> Spontaneous history. Putting patient at ease. Physician's objectivity and interest. Confidential nature of all information. Importance of observing as well as listening to patient. <i>Directed examination.</i> Specific questions.	
IV. <i>Free Association.</i> To be used when patient is "emotionally blocked" or in rut of thinking. Normal thinking process. Effect of emotion in thinking. Repressed painful memories released by free association. Much material non-contributory. Patience necessary for teaching technique. Disadvantages. Advantages.	
V. <i>Dream Analysis.</i> Differences between dream and waking ideas. Primitive thinking in dreams. Expression of wishes and fears. <i>Rationalization and confabulation</i> in dreams. Causes: <i>cortical activity; content; form.</i> Content most important element. General meanings. Danger of over-emphasizing sex element. Free associating to each of dream symbols. Value in disclosing dynamically forgotten memories.	
VI. <i>Jung's Association Test.</i>	
VII. <i>Hypnotherapy.</i>	
VIII. <i>Information from Relatives.</i>	

CHAPTER VIII

	PAGE
STRESS AS A DETERMINING FACTOR	157
I. <i>Nature of stress.</i> Relative term. Complexity of social demands and desires. Stress, tension producing in terms of attitude toward it.	
II. <i>Therapy of Stress by removal.</i> Financial assistance the best therapy in case of actual want; medical aid, in case of physical illness. Removal from stress. Children's behavior problems cured when parents are cured. Excessive demands on retarded children. Reducing requirements made on patients suffering from senility or brain injury.	
III. <i>Therapy of matrimonial stress.</i> Causes of marital difficulties. Value of discussion with mate. Giving specific information and advice on technique of intercourse, use of contraceptives, etc.	
IV. <i>Alleviation of Stress.</i> Removal of or from often impossible. Adjustment necessary. Variety and relative nature of stresses making imperative change of attitude.	

CHAPTER IX

RETRAINING ATTITUDES AND REACTION PATTERNS	174
I. Cure of neurotic symptoms by changing reaction patterns. Reaction patterns changed by retraining attitude.	
II. <i>General Attitudes.</i> Early formation. Self perpetuating. Psycho-neurotic attitudes: irritable, egoistic, over-emotional responses. Effect of home environment. Psychoanalytic explanation of origin of psychoneurotic traits. Residual irritations.	
III. <i>Specific Attitudes.</i> Interrelation with general. Infinite number of specific attitudes. Contradictory attitudes.	
IV. <i>Technique of Changing Attitudes.</i> Three-fold aim. Necessity for a catalyst, time, and persistence to make changes permanent. <i>Preparation of patient.</i> Overcoming antagonism. Value of thorough examination. Presenting psychoneurotic formulation of the illness. Value of reasonable explanation in eliciting cooperation. <i>Desensitization</i> through discussion. <i>Retraining attitudes.</i> General basic attitudes to be removed; general basic feelings to be inculcated. Technique: repeatedly applying <i>general principle to specific situations.</i> Value of intellectual understanding. <i>Conscious thinking</i> along new lines essential. Value of patient's <i>wishing to change.</i> Reassurance and encouragement. Inevitability of symptom recurrence. Avoidance of making moral issues. Aim of psychotherapy: teach patient how to think; to formulate general attitudes that will enable him to meet specific situations.	

CHAPTER X

CHARACTERISTIC GENERAL ATTITUDES AND THEIR TREATMENT	192
I. Habitual nature of general attitudes. Necessity of breaking old habits and establishing new. Many techniques of therapy. Primary requisites: <i>self reliance, awareness of limitation and assets, objectivity.</i>	

- II. *Emotional Thinking*. Basis of most immature reaction patterns. Comparison with true emotion. Comparison with *logical thinking*. Reasons for lack of progress in social reorganization. Therapy of family. Necessity for patient's *wishing to change*. Giving detailed reasons and specific instruction. Insufficiency of intellectual acceptance.
- III. *Worry*. Form of emotional thinking. Universality of tendency. Normal kind. *Chronic worry*. Effect of foreboding. Therapy: (1) *Stating problem clearly*. (2) *Analysis of possible solutions*. (3) *Acceptance of best solution*. (4) *Carrying through plan*. Therapeutic value of making decisions. Psychoneurotic unwillingness to face facts, to carry out line of thought. Lack of *emotional emancipation*.
- IV. *Emotional Emancipation*. Neurotic love leading to feeling of inadequacy. Natural desire for independence. Parental responsibility. Avoidance of extreme of too much and too little affection. Value of parental interests exclusive of children.
- V. *Attitudes Essential for Mature and Integrated Personality*. *Self Tolerance*, based on ability to "make allowances for human nature" and true understanding. *Ability to evaluate liabilities and assets*. Understanding *vs.* passive acceptance. *Facing Difficulties* unemotionally.
- VI. *Rigidity of Personality*. Value of routine. Necessity for flexibility. Avoidance of extremes.
- VII. *Resentment*. Normal response to frustration. Symptoms arising from anger and hate. *Dispassionate* understanding.
- VIII. *Over-emphasis on What Others Think*. Social control. Value of non-conformity. Necessity for self reliance and courage of one's own convictions.
- IX. *Wishing to Remain Ill*. Value of patient's understanding real source of trouble and wishing to overcome it.
- X. *Understanding Symptoms*. Value of diagrammatic explanation of nature of illness and realization of unimportance of symptoms.
- XI. *Moral Support and Ability to Carry Responsibility*. Self discipline contrasted with asceticism. Complete self reliance impossible. Need for moral support, while learning the self reliance necessary to face facts and assume responsibility.

CHAPTER XI

ADJUVANT THERAPY. SUGGESTIONS, HYPNOSIS, AND DRUGS . 222

- I. *Suggestion*. Temporary but potent aid. Misuse. Destructive suggestion. Avoidance of false cheerfulness and over-gravity. Non-depressing fatalism. Facing death with equanimity. Lack of knowledge resulting in foreboding. Physician's judgment about how and what to tell. Flexibility in therapy.
- II. *Technique of Constructive Suggestion*. (1) *Increasing confidence*. (2) *Direction of thoughts*. (3) *Decreasing emotional tone*. (4) *Raising threshold of pain*. *Direct Suggestion*. *Implied Suggestion*. Suggestive value of physician's personality. Necessity for qualifying remarks. Active role of patient in achieving effects of suggestion. Patients who are highly suggestible. Patients who are resistant to suggestion. Use of *placebos*. Importance of physician's staff. Suggestion for hospital situations.

	PAGE
III. <i>Hypnosis</i> . Nature. Misconceptions. Comparable with suggestion. Aid to not substitute for psychotherapy. <i>Technique</i> . Testing stage of hypnosis. Adjuncts unnecessary. <i>Stages</i> : (1) increased suggestibility; (2) catalepsy and anesthesia; (3) complete amnesia. Post-hypnotic suggestion. Contraindications. Therapeutic value.	
IV. <i>Medication</i> . Suggestive value of sedatives. Avoidance of routine medication. Varying potency and effect. Adjunct to psychotherapy. Methylguanidine.	

CHAPTER XII

ENERGY MOBILIZATION AND EXPRESSION 240

- I. Energy as basis of "force of life." Maintenance, utilization, and amounts. Potential *vs.* expressed energy.
Energy problem: (1) mobilization; (2) reduction or prevention; (3) channeling.
- II. Energy mobilization (Method). Orientation of organism to overcome resistance and gratify desires. Complications, tension the result of mobilized but unreleased energy. Resultant physiologic and psychologic symptoms. Paradoxical role social situation plays in energy mobilization.
- III. *Forms of Energy*. (1) Potential. (2) Mobilized. (3) Expressed. *Potential* dependent on genetic structure. *Mobilized* dependent on psychobiologic orientation. *Expressed*: spontaneous, play, work, constructive, destructive, undirected.
- IV. *Technique of Energy Mobilization*. Habit establishment. *Goals*: short term; long term. Motivation.
- V. *Prevention of formation of excess energy*. *Relaxed attitudes*. Cause of tension. Perfectionists. Technique of acquiring relaxation: (1) understanding mechanism of tension; (2) gaining perspective on self and problems; (3) realization of role of anger and impatience; (4) cultivation of self tolerance; (5) substitution of planning for feeling. Use of hypnosis. *Reducing number of desires*. *Vocalization*.
- VI. *Energy Release*. *Socialization*. *Recreation*. *Hobbies*. Individual differences. Paradoxical nature of energy outlets. Through psychobiologic orientations. *Work*.
- VII. Society's problem: *Furnishing incentives*. *Channeling energy* toward socially valuable goals. *Provision of pleasure giving outlets*.

CHAPTER XIII

PROGNOSIS AND THE CURVE OF IMPROVEMENT 259

- I. *Partial Recovery*. Miracle cures. Unnecessary operations. Recovery without psychotherapy through agency of relaxed environment, retreats, camps, etc.
Duration of Recovery. Therapeutic value of ability to shift responsibility to someone else.
- II. Factors influencing prognosis: Hereditary predisposition. Emotionalism inculcated in childhood. Type of Personality: Age of Onset. Environmental Stress. Sex maladjustments. Coexistent physical disease. Fatigue. Presence of Manic Depressive Depressions. Amount of brain damage. Duration of neuroses.

- III. Complete Recovery. Dependent on ability to find and remove causes. Therapy highly individualized; recovery a relative matter.
- IV. *The Homeostatic Curve of Improvement.*
Improvement not a steady progression but marked by lapses. Importance of physician's and patient's recognizing nature of improvement.
- V. *Normal Swings.* Fluctuations in mood, activity, and flow of speech. Decrease and increase as a unit. Individual differences. Causes: external forces; internal homeostatic physiologic mechanisms. Normalcy of mood swings. Variety of causes.
- VI. *Pathologic Swings.* Intensification of normal swings. Relative independence of "swings" and psychologic factors.
- VII. *Graph of Improvement.* Differences from graph of pathologic swings. Fluctuations in symptoms. Exacerbations and remissions of symptoms. Steepness of recovery curve variable with many factors. Recovery rate conditioned by: environmental hindrances, degree of rapport, amount of cooperation, type of neurosis, etc.

CHAPTER XIV

PSYCHOSOMATIC DISEASES AND THEIR TREATMENT . . . 292

- I. Assumption of lack of organic pathology based on thorough examinations. *Determinants of symptom location.* Variety of symptoms in spite of apparent identity of stress. Psychoneurotic symptoms not imagined. Actual change in tissue. Determining mechanism of functional disorders in constitutional predisposition. Mediating mechanisms, in tension. Infinite variety of psychoneurotic symptoms.
- II. *Cardiovascular System.* Pain over heart. Palpitation, Paroxysmal tachycardia. Essential hypertension. (Cases and therapy).
- III. *Respiratory Tract—Chest.* Sighing. Tics. Pain beneath the sternum. Asthma. (Cases and therapy).
- IV. *Gastrointestinal System and Abdomen.* Difficulty in swallowing. Fullness. Hyperchlorhydria. Peptic Ulcer. "Nervous Stomach," "Quivering Inside." Inability to eat though hungry. Constipation. Diarrhea. Spastic Colitis. Mucous Colitis. Pseudo-Appendicitis. Gall Bladder Pain. (Cases and therapy).
- V. *Genito-Urinary System.* Frequency of urination. Precipitancy. Retention. (Cases and therapy).
- VI. *Dermatology.* Perspiration. Cold hands and feet. Blushing. Pallor. Psoriasis. Non-specific urticaria. Eczema. (Cases and therapy).
- VII. *Eye, Ear, Nose and Throat.* Changes in visual acuity. Tubular vision. Monocular vision. Inconstant diplopia. Pain in ear. Ringing, tickling, throbbing in ear. Deafness. Auditory hallucinations. Rhinorrhea. Fish bone in the throat. Aphonia. (Cases and therapy).
- VIII. *Obstetrics and Gynecology.* Menstrual disturbances. Fear of pregnancy. Vomiting during pregnancy, etc. (Cases and therapy).
- IX. *Insomnia.* Categories: toxic states; poor habit training; overstimulation; neurosis; depression. Use of hypnosis. Diverting interest. Drugs. (Cases).
- X. *Headaches.* Common Types. Intensity. Therapy.

CHAPTER XV

	PAGE
THE PSYCHOSES	342
I. Comparison of neuroses and psychoses. Effect of chronic as compared with acute illness on personality. Variability of response to pain. Organic <i>vs.</i> functional psychoses.	
II. Topics of a psychiatric work-up. Necessity of information from relatives as well as from patient. <i>Information from relatives:</i> General information, list of present complaints, history of present illness, past history, personality traits, family history. <i>Direct Examination of Patient:</i> Appearance and behavior, stream of speech, patient's own story of illness, mood and pre-occupation, intellectual intactness. <i>Mental Status Form.</i> Orientation, memory. General information, ability to calculate, judgment, insight. Special tests.	

CHAPTER XVI

THE ORGANIC PSYCHOSES	355
I. Result of diffuse damage to cortex. <i>Pathologic changes.</i> Etiology: toxic, infectious, degenerative, traumatic, neoplastic. <i>Intellectual symptoms:</i> memory, orientation, general information, etc., difficulties of sharp distinctions between intelligence and emotional control. <i>Personality changes:</i> these are dependent on basic personality and may be manic-depressive schizophrenic, psychopathic, or neurotic.	
II. Organic Psychoses of Infectious Origin such as <i>General Paresis:</i> Etiology, Pathology, Symptoms of neurologic origin, of intellectual deficiency, of personality change. Description of psychiatric states. Treatment, specific with arsenic and fever; general with shock therapy and psychotherapy. <i>Other infectious psychoses.</i>	
III. Organic Psychoses of Toxic Origin such as <i>Alcoholic Psychoses:</i> The variation in response to alcohol, The acute alcoholic intoxication delirium tremens, Acute Alcoholic Hallucinosi, Korsakoff's Treatment, removing alcohol, use of insulin, nutritious food, therapy of diseased personality. Other Toxic Psychoses. <i>Bromide Delirium. Delirium</i> of such toxic-infectious diseases as pneumonia, hyperthyroidism, uremia. Treatment. Nursing care.	
IV. Organic Psychoses associated with Degenerative Diseases. <i>Senile Dementia:</i> Definition. Pathology. Etiology. Physical Symptoms. Intellectual and Personality Changes. Treatment: prophylactic by continuing work, periodic health examinations, diet, mental hygiene (of vital importance), Psychotherapy, Education of family, sex activity, medical treatment, Psychopathic states, shock treatment. <i>Presenile Psychoses, Cerebral Arteriosclerosis.</i>	
V. Organic Psychoses due to Trauma: Relative infrequency due to lack of diffuse damage. Symptoms. Treatment.	
VI. Organic Psychoses due to Cerebral Neoplasm.	

CHAPTER XVII

	PAGE
THE CONSTITUTIONAL PSYCHOSES	398
I. Conflicting Etiologies.	
II. <i>Manic-Depressive Psychoses</i> : Physiologic Illnesses. Swings in: Mood, Activity, Speech. Theories as to causes. Personality changes, physiologically determined. Hypomanic attacks. Manic phase. Variations in depressive state. Physiologic depressions. Gradual manifestation and disappearance of symptoms. Suicidal drives. Agitated depressions. Depressive Equivalents. Vicarious reactions during depressive period. Nature of physiologic depression.	
III. Therapy. Four-fold: shock therapy, psychotherapy, environmental therapy, drug therapy. Psychotherapy as assurance. Little value during acute phases. Necessity for reducing demands. Value in preventing future breakdowns. Environmental therapy. Training family. Social therapy. Work therapy. Institutional therapy. Hydrotherapy. Drug therapy: stimulating, quieting, sleep producing.	
IV. <i>Schizophrenia (Dementia Precox)</i> . <i>Etiology</i> : physical constitution, birth trauma, physical illness, puberty, prepsychotic personality, psychic trauma. <i>Pathology</i> . <i>Symptoms</i> : characteristic onset of all groups, ideas and wishes not checked with reality, primitive thinking, disturbances in association, condensations and displacement, alterations in speech. Disturbances in affect: theatrical moods, affective rigidity, feelings of inadequacy. Mannerisms, Delusions and Hallucinations.	
V. Therapy: Prophylactic. Psychotherapy: constant encouragement; avoidance of forcing; ignoring delusions; giving explanations of symptoms; generalizing about the normalcy of desires; encouraging social and work activity. Group psychotherapy.	

CHAPTER XVIII

SHOCK THERAPIES	441
I. Value of shock therapy. <i>Insulin Shock Treatment</i> : Principle of technique, hypoglycemic symptoms, amount of insulin needed, method of terminating coma, complications, modifications of usual therapy, pathologic results, prognosis, <i>necessity of psychotherapy</i> for recovery to be maintained, sodium-amytal prognostic method.	
II. Convulsive Shock Therapy. Importance of Convulsion not of convulsive agent. <i>Metrazol</i> : technique of administration, preparation of patient to prevent fractures. <i>Electric Shock Treatment</i> technique, disadvantages and advantages of each convulsive agent. Frequency of treatment. Contraindications. Memory loss. Fractures and dislocations. Use of curare-like drugs to prevent fractures. Treatment in ordinary hospitals. Prognosis. <i>Pathology</i> . <i>Combined Insulin and Convulsive Shock Treatment</i> .	
III. Prefrontal Lobotomy.	

CHAPTER XIX

	PAGE
OTHER PSYCHOPATHIC STATES INCLUDING PSYCHOPATHIC PERSONALITY, DRUG ADDICTION, ALCOHOLISM, EPILEPSY, AND FEEBLEMINDEDNESS	462
I. <i>Psychopathic Personality</i> . Causes varied. Types varied. Symptoms: defective emotional control; vicarious reactions; psychotic manifestations. Intense restlessness. Anti-social acts. Disregard of conventions, etc. Need for more adequate treatment by society.	
II. <i>Drug Addiction</i> . Psychical and physical dependence. Principal drugs of addiction. Stages: initial one of pleasure; later one of impaired attention and sluggishness of associations. Withdrawal symptoms. Therapy inadequate and unsatisfactory. Value of institutionalization. Prophylactic therapy: international control.	
III. <i>Alcoholism</i> . Form of drug addiction. Determined by internal drives, variety of responses. Indicative of emotional instability. Involutional decades. Therapy: removal of basic cause. Hindrances to therapy. Psychoses accompanying alcoholism. Conditioned reflex treatment. Benzedrine.	
IV. <i>Epilepsies</i> . Kinds: of gross brain injury; secondary to toxins; idiopathic. Organic in origin. Variety of precipitating factors. Idiopathic. Onset. Intervals of attack. Grand mal seizures. Petit mal attacks. Epileptic equivalent. Habit element. Therapy: (1) Sedation. (2) Adjustment. Proverbial epileptic personality. Possibility and desirability of living a normal life. Use of hypnosis.	
V. <i>Feeble-mindedness</i> . Not a progressive disease. Determining intellectual capacity. Not connected with emotional stability. Idiot. Imbecile. Moron. Causes: heredity, intrauterine disease, birth trauma, congenital syphilis, head trauma, endocrine disturbances, etc. Symptoms: those of the etiologic factor; inability to cope intellectually; emotional outbursts. Effect of too demanding an environment. Therapy: modifying environment. Sex problems. Advantages of institutional therapy.	

CHAPTER XX

NEURO-PSYCHIATRIC STATES IN WAR TIME	493
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- I. Neuroses in the Civilian Population. Intensification of Chronic stresses. Acute stresses of War. Therapy.
- II. Neuroses of Population groups. Anxiety. Fear of immediate future. Distrust. Defeatism. Lack of objective. Lack of determination. Unrest. Vicarious expressions.
- III. Development of Community Mental Hygiene (Prevention of Civilian Neuroses). Morale. Therapy of physical stress. Therapy of civilian attitudes. Mental Hygiene in schools. Educating public to face facts. Formulation of objectives. Socialization. Work. Leadership.

	PAGE
IV. Neuropsychiatric States in Military Service. "Screening." Neuropsychiatric states among Drafted men before Army admission. Neuropsychiatric states among military forces not in actual combat: stresses of; therapy of. Neuropsychiatric states under combat conditions. Prophylactic therapy. Tension symptoms. Symbolic symptoms. Therapy of acute neuropsychiatric states. Shell shock. Front Line therapy. Individual therapy. Group psychotherapy. Therapy at Neuropsychiatric Centers. Individual therapy. Desensitization. Adjunctive therapy: group hypnosis. Socialization. Return of cured soldiers to active combat.	

APPENDIX I

PSYCHOANALYSIS	526
I. Restricted meaning of psychoanalysis. Criticisms of Freudian concepts. Requirements for practicing as psychoanalyst. Summary of Freudian concepts. Psychoanalytic cures. Disadvantages.	

THE THERAPY OF THE NEUROSES AND PSYCHOSES

CHAPTER I

CLASSIFICATION OF PSYCHIATRIC STATES

FUNDAMENTALLY man is not a rational animal. Man's reactions to his parents, to his family, to his pleasures, to his friends, to his association with others, to social organization are far more dependent upon his "feeling tone" than upon that which he "reasons." Within each action primarily determined by the "way he feels," man may to some extent utilize his powers of thinking; but for the most part and in most persons, action based on logical, rational conclusions is rare. For every example cited where such is the case, one can cite in the same person many other examples wherein reason entered only secondarily in the determination of the action.

As a consequence, to understand the "normal" actions of "normal" persons, it is necessary to consider, not whether the actions are "right" or "wrong," not whether they are logical or illogical, but rather that which influences the emotional state. One needs to consider the environmental stress:¹ the danger to security, the wounding of the pride, the physical disturbances, the anger or pleasure of the wife, the approval and disapproval of one's fellow men, etc., before one can understand the reason for an action which may seem illogical or unwise. Moreover, these stresses exert their pressure upon persons who are different in their makeup, and will therefore have different results. In order then to understand how the "normal" man will act it is necessary not only to find out the existing irritations, but to study the person, the original type of constitution, the type of early training, the physical disturbances, and so forth. Man reacts to life, as the result of all these forces, and not primarily because of his thinking. As a result of these stresses and strains,² man develops tensions and learns to express, by short cut symbolic methods, the multitudes of problems which perturb him. Thus there may be such general tension symptoms

¹ *Vide* p. 45.

² *Vide* Ch. VIII.

as anxiety, irritability, sensitivity, and worry; and more specific signs of tension such as tachycardia and moist palms. Man may express his anger at some one person or thing, as a symbol for all the irritations under which he labors. He may strive and work for a goal which is symbolically expressive of all his desires. He may have fears which symbolize his anxiety over many problems. In short, the internal and external stresses to which man is subject may produce "normally" symptoms of tension and symbolism.¹

Psychoneurotic persons are potentially "normal" persons in whom the reaction to life is overly tense, overly symbolized, unhealthy and disturbing. Psychoneurotic symptoms are expressions of the personality disturbance; and these symptoms differ from "normal" personality reactions not so much in quality as in degree and intensity of response. Normal² persons develop tension symptoms, become depressed, irritable, develop headaches over worry, sinking feelings in the pit of the stomach when frightened, tachycardia when emotional, etc., just as do psychoneurotic patients, whose symptoms may involve not only the pit of the stomach but spread to involve the rest of the gastrointestinal tract, and whose symptoms in general are of longer duration than the comparable "normal" reactions of the "normal" person. There is no borderline sharp and distinct between the normal and the neurotic. There are many neurotic reaction patterns which may disappear and reappear into normal reactions. Some of the reaction patterns of a "normal" person may be termed neurotic; while conversely, many of the reaction patterns of the neurotic fall within that range which is designated as normal.

The reaction patterns of both normal and neurotic persons are the result of the influence of stress upon the personality makeup. To understand the neurotic symptom one must understand the forces which brought it about; just as in understanding "normal" reactions one must know the background of the person.

Man's over-reactions to life situations may be not only psychoneurotic but also psychotic. There are many categories of response which are usually listed as belonging in the province of psychiatry, though many of them should fundamentally be considered as part of general medicine. The following outline with the brief explanatory notes is intended for only a perspective view of the psychiatric field, and of the relationship of the psychoneuroses to other reaction patterns present in man. These diseases are not properly diseases, but are the type of *responses* of which man is capable when his

¹ Vide p. 30 ff.

² Vide p. 263 (footnote).

system is modified by disease (constitutional or acquired) and by environmental pressure. The symptoms are personality reactions, which though ill-advised and unhealthy, are types of responses in and reaction patterns designed to meet problems of the existing situation. The personality pattern may thus be phrased in the formula: inherited constitution molded by environment (especially in childhood) under the influence of stress at a given time and in a given setting.

GENERAL OUTLINE OF PSYCHIATRIC DISEASE PROCESSES

I. Amentia.¹—Amentia or mental deficiency is based upon an intellectual deficiency either congenital or acquired early in life. The pathology is a less than normally developed brain. The symptoms are characterized by various degrees of intellectual sluggishness. There are three generally accepted subdivisions: (A) *Idiocy*, wherein the mental age is that of a child less than two years old, irrespective of the chronologic age of the patient; (B) *imbecility*, wherein the mental age is between two and seven, and (C) *mental deficiency*, wherein the mental age is between seven and twelve. The personality reaction of these patients depends upon the degree of their mental deficiency, and upon the environmental stress. These patients may suffer from all the disorders suffered by "normal" persons, in addition to those to which they are constitutionally predisposed.

II. The Organic Psychoses.²—The etiology of the organic psychoses lies in any physical factor which will produce a *diffuse* disturbance in the function of the *cortex*³ of the brain. The pathology of these conditions may be any of the pathologies found in general medicine, and involves such categories as: infectious states of the cortex, *e. g.*, general paresis; toxic states, *e. g.*, alcoholism and drug intoxication; degenerative, *e. g.*, senile and arteriosclerotic degeneration; traumatic; and neoplastic pathology. The symptoms fall into three categories: (A) those resulting from the pathologic disease especially in the rest of the body; (B) those resulting from disturbances of the intellectual processes, such as orientation, memory, ability to calculate, general knowledge, and

¹ *Vide p. 487 ff.*

² *Vide Ch. XVI, p. 355 ff.* The term organic psychoses is used arbitrarily to denote those states resulting from actual pathologic factors as we now know them. It is entirely possible to include in this grouping many other psychoses which at present have no known pathologic processes.

³ *Vide p. 355.*

(C) those resulting from personality changes attendant upon the other two changes. It must be emphasized that to produce an "organic" psychosis, these pathologic processes must be relatively *diffuse*, and involve the *cortex of the brain*. For example, if a disease is not diffuse, such as may occur in cerebral damage following a depressed skull fracture, there may be no psychosis; and if a disease does not involve the cortex of the brain, primarily (e. g., general paresis) or secondarily (e. g., Schilder's disease), such as would for example occur in epidemic encephalitis where the basal ganglia are involved, there may be no psychosis.

III. The Constitutional Psychoses.—In the constitutional psychoses there is no demonstrable etiology, despite all the claims made about involvement of the third layer of the cortex, the disease of the hypothalamus, the endocrine dysfunctions, etc. Where the disease process lies is as yet unknown; there is most likely a strong constitutional predisposition, though it must be admitted that this supposition is as much of a theory as is any of the others. There are two major groupings under this heading; but though it is easy to find clear cut cases illustrative of each type, any one with clinical experience and an open mind knows that there are many cases which are difficult of categorizing.

The first group is *Manic-Depressive Psychoses*,¹ a disorder involving the intensity and direction of response of: (A) mood, (B) physical activity, and (C) thought processes. In the *manic* phase, these three primary functions are intensified and elevated; so that there is (with modifications²): (1) exaltation, (2) increased physical activity, and (3) rapidity of thought amounting at times to a flight of ideas. In the *depressed* phase, there is the reverse of this process: (1) depressed mood, (2) decreased physical activity, and (3) sluggishness of thought which tends to center about one or two ideas. These phases may alternate; but statistically it has been shown that the depressive phase is more common, is most frequent in the fourth decade of life (thirty to forty), and in over 50 per cent of patients occurs only once in a life time. Involutional melancholia is a form of depression characterized by agitation and hypochondriacal delusions.

The second group is the *Schizophrenic Psychoses*,³ (often called Dementia Precox) in which there is a strong tendency to utilize primitive thinking⁴ and to react to life as it is phantasied rather

¹ Vide p. 398 ff.

² Occasionally manic patients instead of being happy may become very angry; their quick flow of speech may give evidence of delusions, etc.

³ Vide p. 421 ff.

⁴ Vide p. 49.

than as it is. The "feeling tone" of the person is markedly involved, less in the form of mood swings and more in the form of "feeling" hurt, persecuted, and inadequate.¹

There are four standardized (though inadequate) subdivisions of schizophrenia. (A) In Simple Schizophrenia the patient may be said to be a daydreaming, sensitive, inadequate person, who retires within himself to the point where society needs eventually to care for him. (B) In Hebephrenic Schizophrenia the patient is silly, (Hebe, the goddess of puberty) grimacing, childish, and with many vivid hallucinations. Deterioration tends to be rapid. (C) In Catatonic Schizophrenia the patient tends to be mute, refuses to eat, and demonstrates disturbances in muscle tone (waxy flexibility). This group has the best prognosis for spontaneous remissions. (D) In Paranoid Schizophrenia the dominating symptoms are projection mechanisms, suspiciousness, and a tendency toward systematized delusions. (Delusions and hallucinations are found to some extent in all the varieties.) A separate entity called pure Paranoia has been culled from this group, but is probably merely a form of schizophrenia.

It should always be borne in mind that *schizophrenic symptoms are only reaction patterns*; and are very much akin to "fever" in organic disease. In themselves, schizophrenic symptoms are not significant in determining the etiology. Some persons may develop schizophrenic symptoms as the result of severe psychogenic stress,² if there is any constitutional predisposition; while other schizophrenic symptoms may be the result of some organic process involving (according to one poorly defined theory) the thalamo-cortical processes. The entire symptom complex is poorly understood; though the lay person usually thinks of this category, when he refers to "insanity."

IV. Psychoses Associated With Other Organic Diseases.

—In this category are the psychoses following disease processes such as pregnancy, Huntington's chorea, multiple sclerosis, brain tumor, etc. In all probability this category should be a subdivision of the organic psychoses.

V. Psychopathic Personality.³—This group is more or less of a waste-paper basket category into which are cast such disorders as drug addiction, psychopathic emotional outbursts, alcoholism (not alcoholic psychoses), sex perversions, vicious criminal ten-

¹ Textbooks speak of schizophrenic patients as having no emotional disturbance. This statement is a controversial point. See p. 421 ff.

² Vide p. 118 (Case H. N.).

³ Vide p. 463 ff.

dencies, etc. Many of these personality disorders may come under the category of neuroses; alcoholism, for example, may be one method of escaping from the troubles of an unstable neurotic personality. These disorders may also be classified under psychoses, as is the case with some psychopathic emotional states. Most of the patients who fit into this category have enough balancing factors in their personality to enable them to adjust, with effort, to ordinary social demands, for short periods of time.

CAUSE vs. FORM

In the above classification, which is a convenient method of describing various forms of human behavior, though it does not illuminate greatly the causes of that behavior, one may understand that the terms "neuroses" and "psychoses" are inadequate to describe the personality disturbance. As a consequence, it is better not to attempt to differentiate between the normal and the neurotic, or between either of these categories and the psychotic or psychopathic states. It is far better to describe just what the symptom complex is, than to attempt to force the diagnosis into one or the other major category. A real etiologic and therefore truly descriptive category will be devised only when we understand more about the underlying constitutional forces, and the mechanism of environmental stress. For purposes of present day description and for therapy, it is better to speak of those etiologic factors we can find, and of observable behavior.

Moreover, it must be stressed that the *cause* of the psychosis lies often in the disturbance in the constitution and the molding forces. The *form* of the psychosis is, however, partially the result of the cultural pattern existent at the time, the emotional needs of the patient, and the ability to symbolize. Thus schizophrenia may be said to occur because of constitutional inadequacy; but whether the accompanying hallucinations appear in the form of angels, and devils, and a fiery inferno as was the case in such patients during the middle ages; or whether the patient's delusions involve being persecuted by radio waves, and mental telepathy, and electric wires, is the result of the culture which exists at the time of the symptoms. In the same way the *form* of the other psychiatric illnesses is in part dependent upon cultural stress, though the *cause* of the illness may lie in the determining forces of the personality.

We are as yet not entirely clear as to the reason for the dif-

ferent forms of psychiatric illness. If one reviews many cases of psychoneuroses, psychoses, psychopathic personalities, alcoholism, and so forth, one is struck by the fact that the psychological and environmental forces which preceded most of these illnesses are as a group essentially the same regardless of the type of illness. Even more impressive is the fact that many persons who remain "normal" may be subject to stress of the same character and intensity as are those who break down with some form of psychiatric illness. There are only a few major categories of stress into which most of the individual variations fit. As a consequence, one is forced to the conclusion that the form of the "mental breakdown" is dependent less upon the environmental or existential pressure and more upon the type of person on whom this stress acts.¹ The person is in some way susceptible, either by heredity or training, first, so that a stress which would leave many persons "normal," will provoke a psychiatric illness; and second, so that a particular form of illness will result. It is the study of the make-up of the person, particularly the inherited constitution,² as modified by the early environment, which will give us an understanding of the various forms of illness.

The type of predisposition present in the make-up of the person is the major reason for the relative infrequency with which psychoneurotic patients develop psychoses. Only infrequently does a patient develop first a mild neurosis which later becomes more and more severe until a schizophrenic illness occurs. The patient's first reactions tend to be mild forerunners of the eventual illness; so that the earliest signs of a schizophrenic condition tend to be symptoms of withdrawal or suspicion; the early signs of a manic-depressive depression tend to be fatigue, insomnia, "decreased pep"; those of a neurosis tend to be mild hypochondriacal complaints, etc. However, there are many variations in such a formulation, for the border lines between the various forms of mental illness are broad and interdigitating; and though it is not the rule, not infrequently one may find neurotic-like symptoms as the earliest manifestations of a psychosis. In those instances where a neurosis does precede a psychosis, one can often discern queer or distorted complaints, or the setting of other non-neurotic background.

VI. The Psychoneuroses.—The Psychoneuroses (or neuroses) are symptom complexes or personality reaction patterns resulting from the interplay between constitutional and environ-

¹ *Vide* p. 128.

² *Vide* p. 186.

mental forces; are of an unhealthy, immature, overly tense and excessively symbolic character, and differ from "normal" reaction patterns primarily in intensity of response and in diffuseness of response. As a consequence, many normal persons may temporarily have some responses which are intense enough to be termed neurotic; whereas many neurotic symptoms are difficult to distinguish from "normal" responses.

Mechanism of Production of Neurotic Symptoms.—When a person sees a mad dog and his heart begins to beat rapidly, there is some translation of a visual image into a physical disturbance of the heart. Yet to say that light is converted to rapid heart beats is not a true statement of the case; for usually men see dogs and do not have a physical response. In the above instance, it was not the simple visual image of a dog which was effective; it was the fact that man interpreted the dog's actions to be dangerous which produced the tachycardia. Extended analysis of most situations will show the same phenomena—it is what the man "thinks" or "feels" which determines whether the heart will beat fast. When we hear of someone's death, we are emotionally unaffected if that death is of some unknown native in far off Africa, or we are deeply affected, emotionally and physically, if the death involves someone we love dearly. The effect of a stimulus upon our emotions and our bodies is practically always dependent upon our *interpretation* of the stimulus.

The interpretation is made not in the brain as a whole, but in the cortex of the brain. The mass of white matter, of basal ganglia, of nerve tracts have relatively little to do with interpretation. Decorticated dogs can very rarely develop conditioned reflexes, and man without a cortex cannot think. The second link then between the mad dog and the heart, in addition to the light rays, is man's cortex. The next question is, "How does the cortex transmit its impulses to the heart?"

As far as we know today, the hypothalamus is the highest center of the sympathetic and parasympathetic nervous system (*i. e.*, below the premotor area of the cortex). Impulses come, in all probability, from the cortex to the hypothalamus, and then from the hypothalamus, by stimulation of the sympathetic nervous system, to the heart so as to increase the rapidity of its beat.

In similar fashion, any interpretation by the cerebral cortex which gives rise to what is called an emotional disturbance, will cause stimulation of the hypothalamus and hence *actual physiologic* reactions in almost any part of the body. The fact that the

hypothalamus is stimulated as a unit accounts for the fact that impulses tend to travel to every portion of the body and it furnishes the basis for the wide number of complaints in those persons who have been described as hypochondriacs and neurasthenics who "imagined" their ailments. Headaches, dry mouths, lumps in the throat, choking sensations, palpitation, "acid" stomachs, spastic colitis, etc., are all evidences of *actual physiologic* symptoms resulting from disturbed activity of the autonomic nervous system, that disturbance in turn being the result of the kind of cortical activity which we associate with emotional attitudes.

The above group of symptoms are essentially physiologic in character. But man in addition thinks, and uses symbols. When these symbols are misused (see Chapter III) the patient develops symbolic symptoms. When a person is utilizing an emotional attitude, he may express that attitude indirectly through a symbolic symptom instead of directly. Such indirect expression is unhealthy, immature, and neurotic.

Psychoneurotic symptoms are not imaginary, and are characterized (1) *physiologically* by tension, and (2) *psychologically* by symbolism. Both of these types of symptoms occur among normal persons as well as among psychoneurotic persons. Psychoneurotic symptoms are better described individually by the terms tension, or symbolism or their combination rather than by attempting to group them arbitrarily. The traditional classification which includes, (A) neurasthenia; (B) hysteria; (C) anxiety states; and (D) obsessive compulsive or psychasthenic states, culls out conglomerations of syndromes which apparently have some relationship to each other but which, except for extreme cases, are of little descriptive or etiologic significance. Each subdivision of the neuroses may be represented as a dense conglomeration of symptoms lying within a diffuse matrix of emotional instability containing all the psychoneurotic symptoms. Within this diffuse base are many symptoms common to all the psychoneuroses just as fever, leucocytosis, anemia, anorexia, and constipation are common to a host of dissimilar physical diseases. At some points, certain symptoms increase in intensity and form syndromes. These syndromes differ from each other only in degree and selection, but not in fundamental character. It is suggested, therefore, that neurotic symptoms be no longer "lumped together," and that they be described as tension or symbolism symptoms, which terms are indicative of the mechanisms involved and which suggest the therapy to be followed.

A. TENSION SYMPTOMS

Tension Symptoms.—The symptoms presented by the patients suffering from psychoneuroses may be those of a state of general “psychological” tension or of focal tension (stretched, overly active) of the autonomic nervous and other related systems. (1) The *general tense attitudes* show themselves in irritability, anxiety states, “worry,” over-concern about one’s self, egocentricity, and even an inability to concentrate on anything unrelated to one’s problem. These symptoms have their basis in emotional factors; and they tend to be present, in varying degrees of intensity, in all the forms of neuroses. Such signs and symptoms of tension are present, however, not only in patients who are neurotic, but in normal persons when they are laboring under strong emotional stress.

(2) The *focal tension symptoms* show themselves primarily in the evidences of disturbed activity of the autonomic nervous system (and related systems). These are in addition to the general state of tension which manifests itself in the “emotional attitude” of persons. Disturbance of the central nervous system may show itself in tension of striated muscles. Over-activity of endocrine glands may be manifest through increased basal metabolism, hyperfunction of the adrenals, etc., as expressions resulting from the over-activity of the hypothalamus, through the supra-optic-hypophyseal stalk. Speaking more succinctly one may say: though all integrative systems are to some degree involved in tension, most focal disturbances result directly or indirectly from disturbed activity of the autonomic nervous system.

As a consequence of such focal tensions, there may be disturbances in cardiac rate and rhythm, showing clinically as tachycardia, extrasystoles, cardiac pain resulting from spasm of the coronary vessels;¹ there may be respiratory disturbances expressed by deep sighs, a sense of oppression across the chest, chest pains, etc.;² there may be gastrointestinal disturbances such as hyperchlorhydria, spasms of the cardiac or pyloric sphincters of the stomach, vomiting, spasms of the intestine, of the gall bladder ducts, mucous colitis, constipation, diarrhea, etc.;³ there may be bladder disturbances such as frequency of urination, urgency, retention;⁴ there may be sexual difficulties: impotence, priapism, dysmenorrhea, delayed or too frequent menstrual flow;⁵ there may be disturbances in vision, in the functioning of the eye, ear, nose

¹ Vide p. 297 ff.² Vide p. 40 ff.³ Vide p. 305 ff.⁴ Vide p. 314 ff.⁵ Vide p. 328 ff.

and throat;¹ there may be stammering and stuttering resulting from tension of the speech muscles; there may be tics, perspiring palms of the hands, and soles of the feet, cold hands and feet. All these and many more symptoms for which no definite "organically" pathologic basis has been discovered may result directly from over-activity of the autonomic nervous system or indirectly via the influence of this system on the adrenal, pituitary, and other endocrine glands. The fact that the autonomic nervous system coordinates all activity accounts for the widespread symptoms in the neuroses.

These general and focal symptoms occur in most of the psychoneurotic patients: preponderantly so in those suffering from neurasthenia and anxiety states, relatively less so in those categorized under the labels of hysteria and obsessive-compulsive neurosis in which states symbolic symptoms are more common. The traditional description of neurasthenia which follows is an excellent example of the innumerable tension symptoms which may be "lumped together."

Neurasthenia (derived from the Greek meaning nerve without strength) is a syndrome characterized by weakness and hypochondriacal complaints. There is general muscular fatigue, there is lassitude, lack of interest, anxiety, and irritability. The hypochondriacal complaints may involve almost any part of the organism and generally are widespread. There may be headaches; "eyestrain"; "sinus trouble"; soreness of the gums; a "lump in the throat"; abdominal complaints of all sorts including "a nervous stomach," "cramps," a spastic colon, constipation, diarrhea; frequency in urination; and vague aches and pains in the extremities. Indeed in some of these patients it is difficult to mention any part of the body that is not or has not been "ailing."² The following case is illustrative:

The patient, aged thirty years, single, female, came to the clinic complaining of a feeling of lordosis, an inability to straighten her back, a radiating angular pain, a tickling of the nostril and a tickling in the eardrum, a constriction in her head, difficulty in inspiration, a peculiar tightness of the abdomen, urgency of urination, and general weakness. She had been perfectly well until July, 1930, when her mother died. She then had attacks of belching, with eructations of sour fluids. In November, 1935, she entered business college, resolved to lead her class. She succeeded in doing so, but worried greatly about maintaining her scholastic standing. It was at this time that the symptoms mentioned above developed. She was unable to

¹ *Vide* p. 320 ff.

² *Vide* p. 323 (Case W. H.).

obtain work and had to be supported by a friend. A thorough physical examination revealed no organic findings.

Tension symptoms may become focalized¹ to any portion of the body. When the cardiovascular system is involved there is often associated a great deal of anxiety. This fact has led to the culling out of a so-called anxiety syndrome which differs only in intensity from the neurasthenic group just mentioned, and in actual practice is not always possible to differentiate, because of the presence of minor "neurasthenic" symptoms. Formally, *anxiety states*² are characterized by extreme tension, with fearfulness, apprehensiveness, and a number of striking vagotonic symptoms. Anxiety, it will be remembered, is found in most of the psychoneuroses, but in this subdivision is almost in pure culture. Most of these patients have no major cause for anxiety. In many, the anxiety seizes upon some accidental occurrence as an outlet, so that speaking in public, hearing certain noises, or even smelling or seeing certain objects may bring the anxiety to a climax. The anxiety symptoms, in addition to the subjective feeling of uneasiness, are often associated with a "sinking feeling" in the pit of the stomach, and with cardiac signs which may go to the point of extra systoles. Frequency of urination is often present.

Anxiety *attacks*³ may occur; and not infrequently a patient will state that he was suddenly awakened out of a sound sleep with a strong feeling of apprehension, at times mounting to a fear of death. His heart will pound rapidly, and his breath will come in quick gasps. The patient will then get out of bed and walk around. When the physician arrives, there will be no physical evidence of any abnormality; and later the patient will fall asleep. Such attacks are characteristic. Attempting to elicit precipitating factors such as bad dreams just before the attack, emotional upsets, or other physical or psychologic causes, often fails. The immediate etiologic factor may precede the attack by one or more days and may be a minor incident. On the other hand, the anxiety attacks may occur during the daytime and may take the form of paroxysmal tachycardia. These attacks vary in frequency and often seem to occur without any cause; generally, however, in the background is some topic of concern over which the patient feels very apprehensive. Many of these patients appear to be perfectly adjusted though they feel insecure and inferior internally. "They worry inside."

¹ *Vide* p. 294.

² *Vide* p. 56 (Case B, U.).

³ *Vide* p. 117 (Case D, J.).

Marie C., aged thirty-nine years, stated that her complaints were limited to definite attacks which occurred at night. She awoke with a feeling of anxiety and apprehension, usually about two o'clock in the morning. The attacks were not preceded by bad dreams, or by other emotional causes, that she recalled. During the attack she was conscious of severe palpitation, a marked feeling of suffocation, and she broke out into a profuse sweat. The attacks were accompanied by a fear of imminent death or of going insane. The intense reaction subsided within a few minutes; but the feeling of anxiety persisted for hours, sometimes throughout the night. She found that getting up and walking about tended to produce some measure of comfort. Returning to bed brought the attacks back in full force. During the daytime, the patient occasionally had a mild variation of the above attack, but these attacks were unaccompanied by the physical signs and symptoms. A thorough physical examination revealed no organic basis; and an electrocardiogram showed the heart perfectly normal in spite of the fact that a physician noted marked extrasystoles at night time during an attack. In the psychiatric examination, the patient stated that she was worried over financial matters and over the health of her three children. This condition, however, appeared rather superficial; and deeper questioning brought out the point that she was exceedingly concerned over the sexual act. She was Catholic, and had used only the so-called "free-period" method to control pregnancy. This practice had not been successful, and she had had three children within the five years that she was married. She reported that during the first two years she was unable to respond satisfactorily to sex relations, but afterwards, until the onset of her complaints, she had an intense desire for sex relations and responded to coitus with great satisfaction. In the early part of 1934, the patient and her husband decided to limit off-spring by abstinence. This proposal they could not carry out completely, and sex relations occurred two or three times a month, and were limited to the so-called "free-period." An intense conflict resulted from her desire for the act, her fear of pregnancy, and her wish to carry out the orders of her faith. This conflict was at the basis of her anxiety state.

B. SYMBOLIC SYMPTOMS

A symbol is that which stands for or suggests something else. Symbols are essential elements in the development of modern society. Words are symbols of the objects they represent. An "M.D." after the name is a symbol of training for four years in a medical school, for a certain amount of internship, for such and such skill and ability, etc. The symbol is a short-cut way of saying a great deal.

Despite absolute essentiality of symbolism, we must always keep in mind the fact that symbols may be so misused as to be highly detrimental. There are two main dangers to symbols, even as the average man uses them: (1) man tends to forget what the symbol *really* stands for, and (2) tends to use the symbol as if the symbol

were the important thing. Thus the Church (of any faith) was created so that man could worship and respect the fundamental tenets of righteousness, goodness, help towards one's fellow man, avoidance of evil actions, and to pray to *God* to help him follow these and other similar tenets. The church (from *kyriakon* meaning the lord's house) does not have to be a mansion of marble or a hut of thatched leaves or a world with the sky as the roof. The only provision of the church is that in it one be able to pray for greater strength to do that which is right and avoid that which one considers wrong. The church is a symbol, a place where one can reaffirm the basic principles of one's creed. What is important is not the church, but the creed, not the symbol but the meaning behind the symbol. So often men are respected because they are religious church-goers, even though in every-day life these same men may be malicious, penurious, and sadistic persons. Both these kinds of men and the society in which they live have placed more value on the "symbol" of church and ceremony than upon the "principles behind the symbol:" of respect for self and for fellow man.

This misuse of symbols in every-day life finds itself again in the psychoneuroses. The patient suffering from strong emotional problems which are too bitter for him to face, tends to express his emotion over these problems in a symbolic fashion, and then centers his attention upon the symbol as if it were his main cause of concern. Usually, the symbol performs a useful function. A man on the field of battle may suddenly go blind—symbolically blind—because: (1) he is frightened over the carnage which he witnesses and is unable to face the fact directly, (2) he then centers his attention upon his blindness instead of upon the battle immediately before him so that he is diverted from thinking about "the awful scene," and (3) by becoming blind he is immediately removed from any situation of danger. It is difficult if not impossible in such situations, which have occurred innumerable times in battle, to distinguish between conscious malingering and unconscious "hysterical" symbolic symptom; and only wide experience, plus the fact that these patients are often willing to undergo operations upon their eyes to obtain a "cure" give us an understanding of the difference which exists. Basically, all persons who pay more attention to the symbol than to the facts behind them are unable to face disturbing facts objectively; and since, unfortunately most of the human race has this weakness, in relation to

such things as race, religion, politics, patriotism, economics, etc., one can understand how some persons will be unable to face the facts of their personal difficulties directly and so resort to symbolic expression of their concerns.

Symbolic Symptoms.—Many of the symptoms (reaction patterns) of neurotic patients are symbolic; that is, the symptoms represent in condensed and often obscure form, underlying emotional difficulties and conflicts. Frequently the symbolic symptom has elements of tension, but more frequently it is a more or less pure ideational expression. Thus a patient may have a paralyzed arm, and yet no evidence may be found of any organic disease or even of any disturbance in the autonomic nervous system. A cure by psychotherapy will later confirm the diagnosis of "hysteria." The hysterically paralyzed arm is a symbol, a symbol which represents, *unconsciously*, to the patient, the underlying disturbing emotions. Moreover, the symptom enables the patient to focus his general unhappiness and distress on a concrete and tangible illness. This finding of an outlet for the pent-up internal emotions serves a function of release, expression, and the "taking one's mind off" the other and etiologic causes.

Miss I. D., aged seventeen years, came to the clinic complaining of a paralyzed arm. Thorough examination revealed no organic disease, and no evidence of any physiologic disturbance associated in any way with the arm. There were other symptoms of tension, of irritability, of depression with crying spells, of tachycardia, etc., but none of these other symptoms could explain the arm paralysis.

The paralysis was diagnosed as a symbolic representation of underlying emotional conflicts, and a further examination of her history confirmed the diagnosis. The girl lived in a very unhappy home; her father was a confirmed alcoholic who had mistreated the patient's mother "till he caused her death." The stepmother was cruel and mean, seizing every opportunity to berate and physically beat the child. The patient's sister had run away at the age of fifteen to get married, "just to get out of the home." The patient cried constantly, but could find no means of escape.

One day the stepmother began to beat Ida, and Ida put up her arm to ward off the blows. The blows struck her arm and the patient cried and sobbed that her arm was hurt. The mother, in a temporary state of alarm, stopped long enough to inquire about the arm, and Ida suddenly felt that she was powerless to move it. She was not seen in the psychiatric dispensary until a month later, but no improvement had occurred. Under psychotherapy, the paralysis disappeared.

In this instance, the symptom was primarily symbolic of underlying conflict and unhappiness, plus resentment of all the unfor-

tunate occurrences in her family life. However, associated with this symbolic complaint, were many other symptoms of general and focal tension. Both of these general groups of symptoms resulted from a personality disturbance due to environmental pressure.

Many other symptoms are of symbolic nature: hysterical aphonia,¹ or inability to speak either at all, or only in a whisper; astasia abasia,² or inability to walk because of weakness in the legs, although there is excellent muscle power while the patient lies in bed; obsessive ideas³ which cannot be eliminated from one's thought, such as fears, and peculiar ideas; *e. g.*, compulsive actions such as continuous hand washing, or the compulsion to touch some object; hallucinations, and delusions. These are but a few of the symbolic representations of underlying difficulties. Each one of the symptoms is meaningless in itself; but it has a great deal of meaning if understood as being symbolic. Such an understanding is essential for a dynamic comprehension of human activity.

Many patients who suffer from psychoneurotic symptoms are called hysterical, neurasthenic, or obsessive, without an understanding of the symbolic or tension nature of the symptoms produced. This tendency to categorize patients and to label them with arbitrarily selected names for arbitrarily selected groupings confuses both the mechanism and therapy of the illness. Moreover, in actual practice, it is the extreme case which fits nicely into one of the traditional patterns of classification; and expert, well trained psychiatrists will often disagree on the classification of cases except those which are sharply defined and entirely typical. The groups called "hysteria" and "obsessive compulsive states" not only over-lap, but are not too divergent variations of the same etiological forces.

Hysteria is a symptom complex presumably characterized by disturbance of any function which is not on an organic basis. Almost any function of the body may be involved. The function of motor activity, of sensory activity,⁴ of the special senses, and even of psychologic processes may be involved. Usually cardiac, gastrointestinal, or respiratory complaints are regarded as not belonging to this group; but the definition of these groups is so vague that some physicians do include among the hysterias these disorders of the vegetative tracts. The Freudian psychologists

¹ *Vide* p. 327.

² *Vide* p. 117 (Case F. M.)

³ *Vide* p. 37 (Case D. W.).

⁴ *Vide* p. 118 (Case B. T.).

speak of an "anxiety hysteria," but this classification but further complicates an already complicated syndrome.

Hysteria is the Greek word for womb, and the ancients believed that an hysterical symptom occurred at whatever site the womb, which wandered over the body, might lodge. The hysterical symptom may involve any function which is under conscious control.

Mr. D. W., aged sixty-three years, suddenly developed a paralysis of his legs which prevented him from walking. He had been perfectly well until four days before examination. He was in normal health in every other way, ate and slept well. Neurologic examination revealed no pathology. While in bed he could raise his knees and flex all his joints even against great resistance.

Mr. D. W. lived with his daughter-in-law. He was a cranky old man who had retired and was tolerated only because he had some insurance which would eventually benefit the daughter-in-law. On the day of the development of the paralysis, his will and policy had been found, and it had been discovered that he was leaving some charities as beneficiaries. In great rage, the daughter-in-law ordered the old man from her home; and the paralysis promptly developed. It was a typical astasia abasia.

In many of these instances it is difficult to distinguish between hysteria and malingering. Indeed it may be said that hysteria is unconscious malingering. In hysteria, however, the symptom is symbolic and dictated by fear or conflict rather than by conscious direction.

Symbolic activity may occur in the form of spasm. Torticollis is a good example. Because of the tendency of this symptom to resist therapy, many authors have insisted that it has an organic basis; but extremely few cases of pathologic lesions have been reported, and in those the evidence that there was a direct connection with torticollis is unconvincing. Moreover, physiologically it is difficult to explain what group of nerve cells could be so involved as to produce only this twisting of the neck and to leave all other muscles undistorted. On the other hand, I have seen cases which were unrelieved by such extreme operations as cutting all the muscles of the tense side of the neck, or cutting the high cervical or accessory nerves; while in other instances, repeated injections of novocaine or alcohol seemed to produce relief (as the result, however, of suggestion). So great is the propensity of these patients to twist their necks, that it has been said that if one were to denervate all the muscles of the neck, and bisect the muscles in addition, the patient would still be able to twist his neck by means of the carotid sheath and the esophagus!

Mr. T. Y., aged twenty-nine years, came to the London Hospital complaining of torticollis. He showed no evidences of organic involvement of the nervous system other than the twisted neck. The patient was put to sleep (sleep treatment consisting of putting the patient to bed for ten to fifteen days and keeping him asleep with sedatives, allowing him to awaken only for food and elimination) for twelve days; and in this deep coma, his head remained in the midline. When he recovered from the sleep treatment, however, his torticollis promptly returned. He was then put in a plaster cast, and so great was the rigidity that anesthesia had to be used to get his head to the midline. When the headcase was removed six weeks later, his head promptly returned to its former position.

This torticollis, unchangeable by mechanical or chemical means, was, however, easily remedied temporarily by hypnosis and suggestion.

Mrs. K. U. had worked for the same firm for twelve years. She was directly under the supervision of the vice-president, and soon learned to handle most of the responsible work. When he went on vacations, she was left in charge. Shortly before the onset of her symptom, this vice-president became exceedingly slovenly, unkempt, and in addition, began to make advances to the patient. The work, also, increased in volume and responsibility, so that any mistake would prove costly. She was informed that as soon as the vice-president retired, she would be given his position, as far as work was concerned. The prospect of having to shoulder all this responsibility made her over-concerned about mistakes. An irritable husband contributed to the picture. Her torticollis developed in this setting, and was symbolic of "avoiding looking at her work." The torticollis cleared up for one day under hypnosis, and was removed entirely when she was taught not to feel the responsibility so keenly as she did.

Sensory functions may be involved. There may be anesthesia, hyperesthesia, or paresthesia. One part or many parts of the body are involved, and usually, inconstantly. The distribution of these anesthetics, as a rule, does not follow any of the segmental or nerve pathways. Often the anesthetics are not complained of, and indeed, not found until they are closely examined, so that the problem of how much they are suggested to the patient is an important one. Characteristic sites of the anesthesia may be the so-called glove anesthesia, involving the hands and wrists; the stocking anesthesia, involving the foot and half the leg; and hemianesthesia, involving half the body. Interestingly, in the last mentioned condition, half of the tongue and one side of the palate on the side of the anesthesia may be also anesthetic. In these instances, the motor power is usually intact, a rare state in organic conditions.

One patient, a girl aged twenty-three years, following an accident, suffered from anesthesia of the dorsal surface of the right hand because of the injury

to the superficial radial nerves. This condition was complained of bitterly, and frequent visits to the doctor resulted. One day, quite by accident, the left hand was tested with the pin, in order to compare its sensations with the other, and the patient stated that she had no feeling whatsoever. It was found that her entire left hand, up to the middle of the forearm, had a hysterical anesthesia; but of this the patient did not complain. It was remarkable that such a complete, even though hysterical, anesthesia could be unnoticed by the patient; it is an example of Charcot's "belle indifference."

The special senses may be affected. In the eye, *visual function* may be disturbed,¹ and there may be partial blindness or complete blindness. Vision may be tubular, that is, all things may be seen as though through a small telescope, so that nothing in the periphery is visible. There may be diplopia, or seeing double; and charting of the visual fields often shows a spiral type of field. The function of *hearing*² may be involved so that there may be deafness, complete or incomplete; there may be constantly-heard noises or peculiar sounds which may border on auditory hallucinations. All these disorders are without organic basis, and are symbolic means of expressing underlying conflicts.

There are many hysterical (symbolic) movements, but these are legion, and description of the individual types is unnecessary, for the principle is essentially the same in all instances.

Miss L., aged thirty-eight years, came to the hospital in a taxi-cab and had to be carried into the clinic on a wheelchair because of her asserted inability to walk. She had been paralyzed for six months, according to her story. The paralysis was of the *astasia abasia* character. A neighbor, who accompanied the patient, gave the following information. The patient has always been a spoiled child. She lives with her mother, aged seventy-five years and crippled with arthritis, and with another sister who is a few years younger than the patient. According to the neighbor, the patient has a full domination over the mother. She is petty and spoiled; and on leaving the clinic once, came home, sat in a chair, and made her aged mother get up and wait on her in spite of the fact that her mother was groaning in pain from arthritis. The first symptom developed at about the age of sixteen. She was in high school and began to have some difficulty with her school work. She lost appetite, and vomited. She saw several physicians and improved temporarily. She worked from the age of eighteen until the age of thirty-three, but the positions which she held were more or less temporary. She would always become ill and have to leave work. She saw various physicians continuously, but improved only temporarily. In 1930, she was in love with a man, but she developed a terrific pain in her neck which she felt might prevent her from being a real mother to her children, and as a result, could not marry the man. The physician whom she saw at the time insisted that there was nothing wrong with her. When she spoke to her girl friends, she often resorted to a baby type of talk. Six months ago, a clergyman came to

¹ Vide p. 320 ff.

² Vide p. 322.

visit her, and when she complained of weakness in her legs, gave her much attention which increased as the weakness developed into paralysis.

Neurologic examination was completely negative, and after the examination, by means of hypnosis and strong suggestions, the patient was made to stand up and walk out. She visited the clinic thereafter for further psychotherapy, without evidence of paralysis.

So-called *mental processes* may be symbolically (hysteria) involved. Complete amnesia,¹ without ability to recall any part of one's history, may occur. There may be amnesia for certain events or situations. I have seen a case of vivid hallucinations in a young hysterical girl. Occasionally coma occurs with, at times, retention of urine for twenty-four hours. Acute and violent emotional outbreaks with very little provocative basis may also occur.

An interesting and extremely common form of the combination of tension and symbolism is to be found in the *speech disorders*. There may be *aphonia*,² whispered voice, hoarseness, or stammering and stuttering. In whispered voice there is a greater or lesser degree of failure in approximation of the vocal cords in their attempt at phonation. Aphonia of the whispered voice type tends to be a symptom primarily of tension and is usually associated with other physical and psychologic symptoms of tension. On the other hand, complete aphonia tends to be more symbolic, a "wish not to speak" or a "fear of speaking."

STAMMERING AND STUTTERING

Stammering and stuttering are extremely common expressions of tension. Speech is so commonly involved because tension is such a common characteristic of our present day society; and since speech is one of the latest phylogenetically acquired characteristics, it is therefore one of the first functions of the organism to be disturbed under conditions of stress. There are *four general types of stuttering* as related to tension states (there is only an artificial difference between stammering and stuttering), but they are not usually found in pure form. The average patient utilizes several forms, forms which differ not in etiology or mechanism, but simply in the particular muscles involved. Illustrative of the first form are those patients who start to speak and then hold their breath before emitting a sound which when uttered usually comes forth in perfectly formed words. In these patients the tension of the respiratory muscles prevents the relaxation and the release of air

¹ Vide p. 80 (Case B. Q.)

² Vide p. 327 (Case K. L.).

normally used in speaking. The second group of stutterers make many facial grimaces before vocalizing, and they may contract the muscles of the mouth, project and withdraw the tongue, wrinkle the face and forehead, before uttering a word which when uttered may be perfectly pronounced, or may be hesitant. The tension of the muscles involved in this grimacing is evident. The third and most common group consists of those persons in whom there is tension and spastic-like contractions primarily of the tongue but also of other muscles of speech such as the soft palate, the vocal cords, and the lips. The muscles employed in the formation of words start to make the sound and then instead of relaxing so that the succeeding phonation can occur, become so tense as to interrupt the formation of the word. The effort of the subject to force the word through, results in further tension of the tongue and other speech organs so that the stuttering sounds are increased. The fourth type of stuttering is more of a temporary and emotional aphasia than a true stuttering. Patients in this group begin to speak and then suddenly forget the word which they wish to use. The word "is on the tip of the tongue," but like the aphasic patient who knows what the object is but cannot name it even though he recognizes when the object is incorrectly named, so this type of stutterer cannot recall the word he wishes to use. A substitute word will frequently come to the fore, and may be uttered simply and perfectly.

These several types tend to merge into one another so that one frequently sees a patient holding his breath, making many facial grimaces, not being able to think of the word he wishes to use, and then bringing forth a battered and unrecognizable form of a word. In practically every patient there tends to be marked general tension, which the patients too often insist is the result of their self-consciousness, rather than the causal factor of the speech symptom. The tension of their speech muscles first originates from general tension; and although by the stuttering a vicious cycle is started in such a manner as to increase self-consciousness, the element of primary importance to treat¹ is not the speech but the tension behind the speech.

Another traditional classification includes the obsessive compulsive group, which however are more obviously symbolisms than are the "hysterical" physical complaints because they tend to be confined to ideas or activities. Thus formally the *obsessive*

¹ Vide p. 296.

compulsive states may be characterized by the word "must." On the one hand, these patients "must" think a certain thought; and on the other hand, they "must" perform a certain deed. In most instances, the person will spontaneously state that the thought or act is silly, foolish, and without reason or justification; yet he cannot prevent himself from carrying it out. If he attempts to avoid carrying out these acts, he will become exceedingly tense, restless, and if forcibly restrained, may develop a panic. There are various degrees of obsession ranging from mild fears of disease, with compulsive hand-washing to clean off imagined germs or dirt, to a severe condition where persons "must" wash their hands two to three hundred times a day. These states are so deeply seated and sometimes so distorted, that they are often spoken of as being allied to schizophrenic psychosis.

Miss S. G., aged twenty-five years, came in complaining that she had an idea that she would kill children. The idea developed one day after she had read in a newspaper about an elderly couple who had killed their child. The idea came into her mind that she too might kill the children of the sister with whom she was staying. The idea persisted, and she could not get it out of her mind. She tried working hard, going to movies, going out with people; but wherever she went and whatever she did, the idea came to her. Associated with it were fear and panic. She told herself that the idea was absurd and crazy; that she had no reason for such thoughts, but the idea persisted anyway. It prevented her from sleeping, disturbed her appetite, made her extremely depressed, and finally forced upon her the idea that she should commit suicide lest she give way to an impulse and carry out the frightful idea that she had. Psychiatric examination revealed that the patient had been in love with a young man in another part of the country. The young man had to leave home in connection with his work. Just before he left, the girl had become pregnant, and her lover had insisted upon an abortion. The patient resented and revolted against the idea, feeling she was killing her child, but finally was persuaded to follow his wishes. When she came to Chicago to live, she was taken in by her sister, who knowing something of her history, soon became jealous and suspicious that she might seduce her husband. The girl was temporarily without means of support, and therefore had to live with her sister, but the friction between her and her sister mounted. It was with this background that she read of the couple's killing their child and that the idea occurred to her of killing her sister's children. She accused herself of already killing one (unborn) child and feared (unconsciously) that her antagonism to her sister might lead her to repeat the act.

The entire groups of "fear states" or phobias,¹ are symbols and may be included in this subdivision. There may be fear of dirt, of disease, of being in closed spaces, in open spaces, by one's self,

¹ *Vide* p. 58 (footnote).

in a crowd, and numerous other fears. As a rule, these fears are associated with anxiety over some more personal difficulty; and the person not being able to face the difficulty develops anxiety, which he then displaces to some incidental or minor irritating condition. Attempting to *eradicate the symptom is futile, unless one understands its symbolic nature and eradicates the basic causes.*

TABLE 1.—TYPES OF NEUROTIC SYMPTOMS¹

Symptoms usually <i>Symbolic</i> ² but not exclusively so	Symptoms expressive of <i>General Tension</i>	Symptoms usually expression of <i>Focal Tension</i> i. e., of a disturbed <i>Autonomic Nervous System</i>
Muscle paralysis	Irritability	Weakness, "being run down"
Muscle tics	Anxiety	Easy fatigability
Anesthesias	Egocentricity	Cardiac symptoms
Hyperesthesias	Concentration difficulties	Gastric difficulties
Paresthesias	Worry	Intestinal spasms
Tubular vision	Over-concern about the self	Bladder irritability
Phobias and fears	Anorexia	Uterine dysfunction
Obsessions, compulsions	Insomnia	Pains and aches in limbs
Abnormal sex interests		Headaches
Impotence		Perspiring palms
Hallucinations		Cold hands and feet
Delusions		"Eyestrain"
		"Ringing in ears"
		Stammering and stuttering
		"Lump" in throat

It is hard to differentiate in a clear cut fashion between tension symptoms and symbolic symptoms, for in any given patient, both sets of symptoms are so intermingled that the task becomes one of separating the yolk from the white of a scrambled egg. Moreover, any given symptom may be at one and the same time an expression of tension and over-activity of the autonomic nervous system, and a symbol of some underlying difficulty. Thus one young woman complained bitterly of blushing spells which came on so frequently that she had become desperate. Since blushing is a vasodilatation in the face and neck, it must therefore be assumed to be a symptom of tension, a symptom of disturbed regulation of the autonomic nervous system. However, a further analysis of her history revealed that this young woman, married four years, had discovered her husband's infidelity, the woman in the case being her own sister. "It made me blush to think of it," besides making her furiously angry. The blushing was thus not only a symptom of

¹ It is assumed that there is no organic disease, and realized that only a few representative symptoms are listed.

² It must again be emphasized that many of the symptoms in this table are an inseparable admixture of tension and symbolism. Moreover symptoms classified as symbolic may simultaneously be focal tension symptoms and *vice versa*.

³ Cf. footnote, p. 86.

tension but at the same time a symbolic representation of her emotional conflict over the entire sexual episode. In the above list, therefore, each symptom must be regarded not as belonging exclusively to one group, but as being usually of that group.

In conclusion therefore, one may say that psychoneurotic symptoms are evidences of tension and symbolism which, though found at times in the normal person, tend to be carried to such an extreme as to be categorized as neurotic. The diagnosis of psychoneurosis is to be based not upon arbitrary groupings such as neurasthenia, hysteria, psychasthenia, and anxiety states which are greatly over-lapping and not contributory to the understanding, but upon the mechanism (tension and symbolism) by which the symptoms are produced. Tension symptoms may be general, or focal. The first expresses itself in general irritability, and the second in disturbed activity of the autonomic nervous system and other integrating systems. Symbolic activity may manifest itself through the use of physical symbols (usually termed hysteria) or through fears and obsessional ideas. Tension symptoms are the *physiologic* response, and symbolic symptoms the *psychologic* response to disturbed emotional states.

CHAPTER II

THE FUNDAMENTAL PSYCHOLOGY OF THE PSYCHONEUROSES

PHYSIOLOGY is based on the study of the functions of cells and organs and their integrative states; psychologic or personality reactions are based on the fundamental drives or tendencies of the organism as integrated in a complex society. The total personality is a function of a *socio-psycho-biologic unity in a given setting at a given time*, and can be understood only if studied as such. These five elements must be studied with reference to each other. It is not possible to draw general conclusions from a study of any *one* of the parts, even if the time and situation are considered; and in like manner, social analysis, psychologic analysis, and biologic analysis are inadequate to explain a person's symptoms unless reference is made to the other analyses; *i. e.*, of time and circumstance.

It cannot too strongly be stressed that it is *only for purposes of convenience and clarity* that a distinction is made between physiologic and psychologic reactions to emotional states. Of necessity they are discussed separately; but in actuality, *personality is a complex whole* responding to, being conditioned by, determining as well as being determined by the environment.

If one disregards all hair-splitting phrases and obscure terminology, it may be generally agreed that all psychologic reactions are built up, pyramided up on two fundamental drives—the drive for self-preservation (ego-maintenance) and the drive for race-preservation (predominantly sexual). In other words, man seeks security and satisfactions. For primitive man, “security” represented material self-preservation through the food-getting techniques and self-protection from the elements, wild beasts, and human enemies. His needs were more immediately acute and his methods more obviously direct than those of modern man living as he does in a highly complex world. There were no “middle men” for primitive man—he killed or produced his own food, and if he were physically stronger or more ingenious he killed or outwitted his enemies. Today man must be content with delayed satisfactions. He is trained more or less intensively over an increasingly long period of time to learn some skill or profession

by which he can secure the money with which to buy the food to give him strength to continue work to make more money. His enemies, too, are less subject to direct defeat. Today a person is relatively safe physically (unless he is a pedestrian), and his enemies become those factors or persons in his environment that offer danger to his ego, his pride, his ambition. Primitive man could not afford the luxury of pampering his ego; he was too busy seeking food and running away from physical danger. Desires and fears in civilized man, however, are no less exacting or painful because they are not, on the one hand, immediately capable of satisfaction, or, on the other, tangible and subject to escape; in fact, they are more so.

Physical security is basic; but mankind has gained a sufficiently adequate technique of control over the physical world to enable him to enlarge the *meaning* of security to include response, appreciation, recognition, approval, etc. In the same way, sex has come to mean far more than physical gratification; it has been idealized as love, a symbol of companionship, understanding, shared interests and desires, comfort, stimulation, and a host of other meanings. In other words, the quest for a satisfying and secure life has always been present as the driving urge; but as the concept of what constitutes such a life is enlarged and enriched, the technique of achievement becomes more involved, and the chances of frustration more numerous.

There are in actuality no rugged (or other kind of) individualists. *Every person is a part of the social whole; and the whole modifies and changes the form of the part.* Consequently the avenues of danger are multiplied, and pleasures become less direct, more symbolized. Life is an endless modification of one's "natural" tendencies so that man may live in the world as it is. These modifications, or more properly prohibitions which in normal growth become inhibitions, are constantly in operation, and each person must experience literally countless prohibitions during a lifetime. We must learn not to cry, not to snatch, not to demand. We must sit still, speak softly, say things we don't mean, refrain from saying those we do. We must eat food we don't like even if we do like it we must eat it in a socially prescribed way. We must wear irritating clothes, pretend interests we do not have, conceal our boredom, mask our joy, restrain our anger, sorrow, or fear. The smiles of adults looking at a yawning baby have a certain nostalgic wistfulness for a lost freedom. Paradoxically, the only way a person can achieve even a modicum of freedom and security is by giving in to many of those restrictions and requirements.

Society says "Which would you better?"; the individual man asks "Which would I rather?" Man is driven by felt needs; society furnishes inhibitions. To the degree that man can appropriate the superimposed patterns into his repertoire of personality reactions is he integrated; and conversely, to the degree that there is opposition and inability to make suitable patterns his own, there will be conflict and consequent tension.

Reaction patterns which are clearly developed and uncomplicated give rise to no disturbances after they have been established. The emotional outbreaks and irritations which may characterize their development disappear if the path is definite and consistently followed. Indeed it is possible for a person to hold apparently contradictory attitudes toward religion, politics, personal ambitions, etc., provided they are uncomplicated by inner turmoil.

Unstable emotional states, however, may result from ambivalent reaction patterns when contradictory attitudes are not harmonized, and maintain their opposing emotional drives. Ambivalency¹ (opposing tendencies or desires) may result from the reactions of the person to environmental pressure. Ambivalent persons swing from one extreme to the other. It must be remembered that individual differences² play a large role—that the same situation may not necessarily evoke identical responses from different persons.

When they are complicated by internal turmoil resulting from indecision or strong desires, these contradictory attitudes tend to remain active in the personality reaction patterns. There results a situation termed "conflict," and the subject is unable to come to a final decision as to which of the two sides of the conflict shall rule. In the psychoneuroses this conflict is accompanied by great emotional tone and is indeed a conflict between two basic emotional tendencies (of basic desire to satisfy and of learned desire to restrain). Inability to make a decision in itself does not necessarily cause conflict; to vote for one party or another, to purchase a blue or red tie, to smoke a cigar or a cigarette; all these are primarily (though not exclusively) "intellectual" conflicts and are resolved without the development of symptoms. When, however, much emotion accompanies indecision, conflict results and the total organism is in a state of unrest. Generally speaking, one may say that deep emotional unrest and conflict occur when basic drives have been involved; but conflict can result from relatively minor indecisions: as whether to take one's vacation in the mountains or at the seashore; to buy a car or save for a rainy day; to

¹ *Vide* p. 81.

² *Vide* p. 245.

partake of liquor and suffer from an exacerbation of the ulcer symptoms or to abstain and feel better the next day. The intensity of the conflict is dependent on the attitudes and the amount of emotion present in an indecision. The causes of conflict often are found in the emotional tone developed early in life: the results of conflict are often the psychoneurotic symptoms discussed in the next two chapters.

Guided by the desires to achieve pleasure and avoid pain, the organism establishes certain *body attitudes*¹ or reaction patterns. The pleasure-pain concept is at first largely in terms of physical comfort. The reaction patterns of infancy are general and undirected; increasingly they become specific and localized. Certain behavior brings pleasurable results; consequently, the behavior is repeated until it becomes habitual.

Man has learned to make habitual² many activities, so that he is more free to focus his attention on objects of interest. Habitual responses require almost no thought, and are automatic and reflex-like in character. Without reflection man puts on the same shoe first each morning, or sits in the same place in classroom, church, or theatre, and moreover feels resentful if someone else "takes his place." It is desirable that much of one's life be automatic—provided the habits thus carried out are energy-saving ones. A man would never even reach his office if daily he had to debate with himself: to get up, or not to get up; to wash or not to wash; to shave or not to shave; to lead out on the right foot or the left; to read the newspaper or not to read, etc., etc. At the other extreme is the person who becomes over-routinized so that instead of action becoming automatic, and so a short-cut to achievement, the emphasis is shifted and the routine becomes an end rather than a means.³ Habit has no value other than its pragmatic worth.

In the same way *much of what a person thinks and feels*⁴ is automatic and habitual, the pattern often having been laid in the forgotten past. The woman who sulks and pouts her way to a fur coat probably does not remember what she gained from her early temper-tantrums; but her technique of control is the same. The man who feels that the world owes him a living no doubt could not recall the details of the over-protection and solicitude which inculcated in him the sense that the world is organized and run for his benefit; but the attitude is ingrained and operative.

¹ *Vide* p. 82.

² *Vide* p. 215 *ff.*

² *Vide* p. 175.

⁴ For a discussion of intellect *vs.* emotion see p. 350 *ff.*

LAWS OF PRIMITIVE THOUGHT

Every person uses his past failures or successes as a standard by which to determine his present reactions. The more objective and "thinking" a person is, the more precisely and specifically can he evaluate his past experiences and "select" an appropriate response. The more emotional and subjective one is, the more immediate, strong, and general the response is, deriving its character from the kind and type of emotion associated with the stimulus on a previous occasion. This latter type of association tends to be *primitive; i. e., characterized by laws of similarity and laws of contagion*¹ (contiguity in time and space).

For primitive man, objects which looked alike were considered to be identical and to have each other's properties (law of similarity). Thus if one wished to dispose of his enemy, he need only make of wax or wood an image intended to resemble the victim and then melt it or stick pins through the heart section. In this connection one is reminded of football rallies in which a straw figure representing the "enemy" team is burned.

Similarly, objects which were in contact with each other or part of each other (law of contagion) were, for primitive man, of the very essence of each other. So if one could collect the cut-off hair, the nail parings, or even the possessions of the enemy, one could by destroying them rid one's self of the person of whom they had been a part. The veneration of relics or the cherishing of objects which have belonged to a great or loved person is the reverse and attenuated revival of this form of thinking.

Such primitive² reasoning is one of the bases for thought. In its unrefined form primitive thinking is present to a large extent in early childhood and in the child-like attitudes carried into adulthood. Wearing clothes similar to those of someone famous tends to endow the wearer with reflected fame; a military uniform helps one to brave deeds; meeting a great man gives one a feeling of distinction, etc.

Superstition is an excellent example of this type of thinking and is illustrated by the person who attaches importance to or even directs his life by broken mirrors, black cats, the location of the stars, the shoulder over which he sights the new moon, the number of letters in a name, etc., etc., etc. Society's concession today to

¹ Cf. Frazer, *The Golden Bough*.

² Primitive reasoning is not necessarily found in primitive society; for modifications of such reasoning began even before men learned the use of sign language. Self-control necessitated by community life gave impetus to "logicality" of relationships.

this irrational conduct is evidenced by the absence of a thirteenth floor in practically all hotels and in many office buildings tenanted by "hard-headed" business men.

In distorted psychoses such as schizophrenia, one *reverts*¹ to primitive thinking and reasoning and does not, as A. Storch² suggests, *reproduce* the actions of one's primitive forbears. Primitive thinking is surcharged with emotion and does not allow for weighing facts critically and objectively. Consequently, the person who bases his judgment on this kind of reason is unable wisely to choose appropriate responses.

The tenacity with which reaction *patterns tend to operate long after the original stimulus is gone and forgotten* is one element of difficulty in understanding or modifying these patterns.³ Another is the human tendency to *symbolize*. We learn to read special values and significance into certain objects and situations, so that they in turn come to represent meanings not inherent in themselves.

Whether a book is regarded as a weapon to be hurled, fire-wood to be burned, or a priceless treasure to be cherished depends on how it is used; just as a red light may mean variously danger or security depending upon whether it is part of a traffic signal or an exit indicator. We learn that an innocent-looking wire may mean death, that a reversed collar proclaims a certain profession, that a cross on a building indicates that it is a church, that a narrow band ring signifies marriage, etc. Symbolization which is a shortcut to realization and appreciation is essential, in a complex civilization, to progress and life, but like any other process if carried too far or not far enough defeats its own purpose.

Two of the major modifications to which symbolization is subject and which if illogically used may lead to the formation of fallacious conclusions are (1) Condensation, and (2) Displacement.

Condensation.—In condensation, several symbols and their concomitant feeling tones become condensed into one symbol. Thus the desire for liberty, and freedom of speech, the right to earn one's livelihood, and the guarantee of protection may become symbolized by the country's flag. When this condensation is utilized with an understanding of the meaning of the symbols behind it, it serves a useful function; when, however, persons react to the symbol itself and are carried away, for example, by a

¹ Cf. regression, p. 81.

² Storch, August: *Nervous and Mental Disease Monographs*, 1925.

³ *Vide* p. 177.

hysterical plea to "save the flag," and in so doing violate the very principles it symbolizes, then the symbol as such has proved a detriment.¹ The dangers in condensation are that the values symbolized are obscured, and the symbol itself becomes an end rather than a function. Many patients will undergo the most dangerous of operations and spend all their savings in seeking relief from a symbolic physical complaint without awareness or desire to correct emotional conflicts behind such a symbol.

Displacement.—Displacement which occurs when emotions involved in one symbol are transferred to another which may be related only by similarity or content, also has an objectionable character. Freud, for example, speaks of one young man who complained of intense nausea whenever he saw or smelled violets. The author had a patient who became deeply depressed whenever he was left alone in a room with an audibly ticking clock. Examination of the histories of these patients revealed, in the first case, that when his proposal of marriage was repulsed with rudeness and contempt by the girl with whom the patient was madly in love, she was wearing violets. The second person had, as a child, been terrified by threats of hell-fire and the story of the clock of eternity ticking off doom and damnation. The one had transferred his feeling of wounded pride, the other his fear of the unknown to the associated objects of violets and clocks, respectively, and continued to respond emotionally to them. Displacement is a common phenomenon present in every-day life and is utilized by dictators and politicians. Dictators seek scapegoats, or begin wars in an effort to *displace* the irritability and anger of their people from some internal frustration to some external source. Rationalization² will tend to fix and harden such displacement so that it may become a continuous source of irritation in itself. Individual persons without such wide and dictatorial possibilities of scapegoats can still find many persons, many ideas, and many other symbols to hate and on which to displace emotional disturbance over their own inadequacy or frustrations.³ Psychoneurotic patients displace their concern over personal conflicts to concern over some psychoneurotic complaint.

So much of emotional stability in adult life is determined by the kind and firmness of the early reaction patterns, that it is clear that the family situation in which they are established is of primary significance. Long before a child develops conflicts of his own he is

¹ A. Korzybski has elaborated a whole system of "Semantics" on this principle.

² *Vide* p. 76.

³ *Vide* p. 57 (Case N. O.).

sensitive to those in his environment. If friction exists between his parents, for example—whether it be of the knock-down and drag-out type or of the grim suffering-in-silence variety, the child feels the tension and is torn between the parents. If each makes a bid for his affection, a conflict between two opposing patterns arises; and the person finding it difficult to choose, vacillates.¹ The result is tension. There are several possible results. If he loves one to the exclusion of the other, he accepts the conflict and tension of the loved one, and toward the other develops attitudes of hatred, shame, resentment, etc. He may turn against both parents; he may shut his eyes to the quarrels and be imperturbed; he may displace his irritability onto someone else.

Mr. B., with marked feelings of unreality, inferiority, and a drive toward suicide, comes from a home which was the foundation of his neurosis. To quote:

"Mother and Father used to fight all the time. As nearly as I can recall, I felt I'd be much happier if they would be like other people. One night my father struck Mother, and the neighbors came in; for weeks thereafter when I went to school I felt that every kid was pointing me out. Father used to drink for many years, but he changed a few years ago when he took up religion. Now he's always nagging on that subject."

Such a home situation left Mr. B. with a feeling of unhappiness, with insecurity and uncertainty as to how to face life. His future conflicts were based in large part on this home pattern of reaction. The panic Mrs. I. developed late in life also had much of its genesis in the family background.

"My mother isn't as intelligent as my father, but she is the only woman I know who would put up with his meanness. I always take her troubles to heart. He has made me so miserable all my life. I was always afraid of him. If I could only take the 'I don't care attitude,' but I can't. Everyone is afraid of Father. He has done much good; he gives money to strangers, and he provides a good living for the family. But he is so mean and has such a violent temper. Now I don't even talk to him."

If a parent, disappointed in his own emotional satisfaction, turns to the child for emotional release, centers his life in that of the offspring, binds him with "the silver cord," it is almost inevitable that indecision and maladjustment will follow.

L. K., aged twenty-six years, was brought in by his mother. He complained of having a "band around his chest," of being very self-conscious, of fearing to go out with girls, of being "nervous," etc. Early in life he had developed a cough and the tentative diagnosis of tuberculosis was made. His mother became over-concerned. The patient was hardly allowed to

¹ *Vide* p. 81.

move. He was not permitted to work; and his mother would drag large buckets of coal up several flights and not allow him, at the age of seventeen, strong and husky, to exert himself. She supervised what he ate and how much he ate. She watched his hours of arising, of sleeping, his manner of dressing, and what friends he had. In all this solicitude she was earnestly serious, and she indelibly stamped the boy with concern over his own physical state. He was shy and uncertain of himself. He did not know how to mingle with people, what to say to girls, even what to do without asking the opinion and advice of his mother. His neurosis was life-long in duration.

The child will be as secure within himself as the parents are, and there is little hope of curing his behavior problems unless those of the parents first be treated.

Not only is the emotional atmosphere created by the parents absorbed and appropriated, but of equal importance also is the position of the person with reference to siblings. Is he the spoiled baby of the family? Is he of the preferred sex? Does he have a brother or sister held up as an example?

Miss C., aged twenty-two years, was the second child of the family. She admired and envied her older sister, and when she did not receive the same degree of attention tried to obtain it by getting in the mother's way. When her mother scolded her and then promptly forgot about the patient, she preferred to have constant scoldings rather than no attention at all. She grew up with the feeling of not being wanted; and when she was constantly compared with her older sister in an unfavorable light, she demonstrated her resentment by increased irritability. She was exceedingly unhappy, emotional, and finally committed suicide by an over-dose of nembital which she took from her father's drug store.

This girl had never experienced real security. The original pattern of behavior started off unfortunately, and instead of being properly handled by the parents, was aggravated by their constant criticism, increasing her feeling of loneliness and "unwantedness"; they actually lavished more love on the patient's sister in an effort to get the patient to change, thereby emphasizing more acutely to the patient how unwanted she was.

The economic and cultural status of the family is of great significance in determining reaction patterns, for it will determine in varying degrees not only the child's attitude toward money but the emotional stability of his parents, the kind of neighborhood in which he lives, the school he attends, the play groups of which he becomes a part, etc. Whether he is socially acceptable in his group will have much to do with his successful emotional emancipation from the family, the development of his sense of personal worth, and his growth as a social individual.

Mr. M. with a painfully intense feeling of inferiority and with

inclinations toward suicide spoke of his home in the following words:

"I never felt I could stand on my own feet socially and economically. Was always very dependent on my home; that is why I never moved away in spite of my troubles. Economic conditions at home in my youth were bad. I sold papers, shined shoes, sold gum, and did everything to earn a few pennies. I felt suppressed, and at the age of thirteen remember walking down a boulevard and looking into the windows. I tried to imagine how those persons lived and my imagination gave me satisfaction. I was always made to believe I must work for the home. Mother insisted that I give all my salary to her, but now she is bitter and only semi-reconciled that I just give her an allowance to pay for my room and board. My entire youth was unhappy. If I could only have had a happy home life, it would all have been so different.

If one knows the type of family life that exists, one can often make a fairly accurate prediction of what type of children will result. Thus the parents of Miss F. M. are described as follows:

"I am glad that my folks are away. My mother hasn't the slightest bit of insight into anything. My father has no friends. Mother has no tact, and nags consistently. My father seems to have the better personality, but mother has successfully dominated him. She just lives for me and my sister, and it just kills me. She wants to know where I go, what I do, comments slurringly on my friends, and once when I brought a young man home, actually insulted him. He never would call after that. She nags my father half to death. She is a perfect example of the old European disciplinarian school. She is the opposite of my father: she is immaculate and neat, while father has become slovenly. He once had marvelous possibilities but was disabled in the Spanish-American War and lives on his small pension; I believe Mother is frustrated and disappointed."

The patient, F. M., (aged thirty-two years), complained of marked feelings of inferiority, of persistent phantasying, of a constant feeling of depression, of a morbid interest in masturbation.¹ All these symptoms could be traced to the patient's insecurity, lack of love and affection, and her seeking some sort of pleasure in daydreaming and in masturbation, the latter having begun at the age of seven.

The conflicts which may arise in the family situations have been discussed in such detail because so much of future stability depends upon the *kind* of reaction pattern established and the permanency with which these patterns are ingrained.

As the person's horizon enlarges to include other groups than the family, *e. g.*, school, "gangs," etc., there is new opportunity for the development of conflicts. If a child cannot "keep up" with

¹ *Vide* pp. 74; 109.

his classmates intellectually, socially, or financially, he may develop a sense of inferiority. If his training at home has been such as inadequately to prepare him for shared activity, he may find social adjustment difficult. However, even in these situations the tie-up with the family situation is clear; and the kind and stability of reaction patterns already in force will have much to do with how the new situation will affect him.

There are many complicating factors in connection with one's choice of life work. Is he financially in a position to train for his chosen work, or is he pressed into gainful occupation at the earliest possible age? Social approval is so important a part of the modern conception of security that the "caste system" of the relative dignity of various jobs and positions may force a person into lines of activity which though financially rewarding, leave him unsatisfied. Family pressure may also be brought to bear either in terms of need or insistence that a certain type of work is expected. The person is fortunate but rare who knows what he wishes to do, is able to prepare adequately to do it, and finds creative pleasure in the doing.

Of all the inhibitions superimposed by society, none are more tension-producing than those set up by some religious teaching and by sexual taboo.¹ Not only are so many of the formalized teachings of religion contrary to "natural" instincts or desires but too often compliance is gained through the force of threats. A person follows his "natural" desires, and because they are contrary to what he has been taught is "right," develops a sense of guilt. If the ordinary mistakes of childhood are held up as "sins" and the wrath of God invoked to substantiate the parent's irritation, the almost inevitable result is a distorted sense of values. Most of the sexual maladjustments² have their origin in this conflict between what the individual person desires and what society says he may have, between his urgent needs and what he is taught is right.

The organism expresses its psychologic entity through its reaction patterns; and to the degree that these patterns are security-yielding and satisfaction-giving will the individual have psychologic wholeness or integrity. Where there is sufficient conflict to produce tension, aberrant reaction patterns will be developed; and the degree of their departure from the norm will in each instance be determined by the amount of stress both as it actually exists and as it is "felt" by the patient.

¹ *Vide* p. 59 (Case D. N.).

² *Vide* pp. 108; 111.

CHAPTER III

PSYCHONEUROTIC (SYMBOLIC)¹ SYMPTOMS EXPRESSED PRIMARILY BY PSYCHOLOGIC FACTORS

MANY of the symptoms present in psychoneurotic patients are in the nature of "organic" complaints which are associated with such physiologic changes as tachycardia, hyperchlorhydria, spastic colitis, etc., which are, in turn, the result of emotional stress. A second group of symptoms inseparable from and found always in conjunction with the first may be termed "psychologic."² These latter symptoms, such as feelings of inferiority, fear, and certain hysterical reactions, as the former, result from emotional disturbance and have as their basis conflict and tension.

The symptoms resulting from these emotional disturbances and conflicts are expressed by various psychologic mechanisms. To treat the symptoms in themselves will usually be a futile undertaking, in so much as they are permanently removed only if their underlying cause is cared for.³ Psychoneurotic symptoms are legion and only a few of the more common are discussed herein. However, the *symptom in itself is relatively unimportant*, for though it is annoying to the patient, it is usually only a superficial expression of very disturbing emotional states in the background. In many instances, anxiety and fear are often associated with psychoneurotic complaints. Fears in the neurotic patient usually have their origin in emotional turmoil over unsolved problems and conflicts. Although the ideas involved in the conflict are as a rule successfully repressed, the pent-up emotions, like constantly heated and compressed steam, may escape into consciousness. Even this "escape of steam" is not direct, for all that the patient is aware of is a general feeling of concern, anxiety, or fear. Such patients often complain of being afraid, though they readily admit that they "have nothing to be afraid of." Such a fear is termed "free floating anxiety."⁴

Mr. B. U., aged forty-three years, complained of a violent feeling of terror. He would be working in his store, and suddenly, "I'd get scared. It comes

¹ Vide p. 33 ff.

² It must repeatedly be emphasized that the distinction between psychologic and physiologic is but a matter of convenience and not of fact.

³ Vide p. 296.

⁴ Cf. Intransitive fear.

like a shock; the pit of my stomach feels tight, like a lump; then I become panic-stricken and have to rush out for air. I feel as if I were going to die. I can't explain it. I don't know why it should come."

Mr. B. U. was actually depressed over financial matters. His expenses were greater than his income and were going to increase, with the birth of an expected child. The future was very uncertain. He toyed with the idea of giving up his business, but could see no way of getting employment during a period when there were so many unemployed. He loved his family deeply; and the thought of what they faced—the poverty, the degradation, the attendant suffering—was more than he could bear. He tried to forget these matters, but when his mind was apparently blank he would be seized by this over-whelming fear.

This man complained of fear—just fear; intransitive fear without an object. The basis for it was his financial insecurity, the emotional tone of which was so great that it manifested itself, even when the mind seemingly was "blank."

The mind is so constituted that it is dissatisfied with that which it cannot understand, and consequently there is a tendency to "invent" reasons if the true ones are not apparent. As a result, the patient may "select" an object of fear, and focus on this "selected" idea all the emotion (displacement)¹ that has its true origin in the conflict or turmoil. There may be fear of impotence, of disease, of heart trouble, of dirt, or of any other of a myriad of ideas or objects. Often that which is feared is "selected" because it has some close relationship to the conflict, though the person may be unaware of the relationship.

Dr. N. O., aged twenty-seven years, an interne in a large hospital, had an intense fear of having rabies. Three months earlier he had been in the laboratory and had been scratched by a dog. He washed the scratch well (it was very superficial), painted it with iodine, and cauterized it with phenol. He became obsessed with the fear that he had hydrophobia. The dog seemed normal, but the patient insisted on getting a course of rabies vaccine. The dog was kept alive and showed no signs of rabies long after the incubation period was over, but the patient still feared he had rabies. He studied his throat, felt that he disliked water, developed headaches, and became so apprehensive and fearful that he could not do his work. He was sure he was going mad; and all reassurances and consultations failed to relieve him of his fear.

Dr. N. O. was a very conscientious interne. He had worked his way through medical school and had been able to earn good grades. He had left his family in anger. They had wanted him to quit high school and go to work to help the family. They had refused to have anything to do with him while he was in school. He had finally reached his goal, and was going to go out into the medical world; but he had no one to turn to for help. He had no funds with which to rent an office or buy food. Moreover, he had fallen

¹ *Vide* p. 51.

in love and was eager to marry. The young lady, who was his same age, had another suitor whom she liked less but who could provide a sufficient livelihood.

His turmoil was great, and he could not sleep for thinking of his problem. When the dog scratched him, all his anxiety was concentrated on the scratch as a symbol of the idea that his troubles were "driving him mad."

The occurrence of the scratch was seized upon to express his conflicts. He could not be convinced that there was no hydrophobia developing because the constant flow of emotion from his own personal difficulties overcame his objectivity and offered a mode of escape (albeit a very inferior and inadequate one) from his seemingly unsolvable affairs.

The fears often have a definite relation to the conflict.¹ In unfounded fears of syphilis, the subject may be troubled by sex desires which he inhibits but which, nevertheless, are very demanding and which he is convinced need much inhibition. Fears of and actual impotence occur on a similar basis. In some instances the basis is a feeling of guilt over masturbation.² Many youths are seen who state that they are afraid to get married, because they "abused" themselves so much during childhood. When they think of sex and marriage, the fear inculcated in them becomes so great that it usurps the sex emotion, and as a result erections do not occur. If the guilt feeling is strong enough, even much sex play may not bring about an arousal.

Fears³ of disease, of death, of going crazy are expressions of an emotional turmoil so strong, that the person, being unable to come to a clear, definite, and objective conclusion, feels that he "will go mad" or even "die from his worry." Or the situation may appear so complex that the patient wonders whether suicide is not the only real escape. When this question comes to mind, the fear develops that he may actually commit suicide, and this fear is the only idea permitted to consciousness, all the preceding emotions and thoughts involved being repressed.

Along similar lines is the fear of being in a small place (claustrophobia), for then one's fears seem to have no "room to escape," and the emotions are intensified. Some patients fear to be alone, because they fear they may attempt self-destruction, this fear in turn being the result of an unsolved conflict.

¹ *Vide* p. 293.

² *Vide* p. 108 ff.

³ The formal names given these various fears is made up of the Greek name of the object plus a suffix of phobia. Such names are in themselves meaningless and are not used herein. Some of the more common phobias are agoraphobia, or fear of open spaces or of being away from home; claustrophobia or fear of small or closed spaces, of crowded street-cars, etc.; mysophobia or fear of dirt, contamination, or sickness; anthropophobia or fear of men; erythrophobia or fear of blushing (redness); zoophobia or fear of animals; pyrophobia or fear of fire; syphilophobia or fear of syphilis; and there is even a term called phobophobia or fear of having fears.

Some patients feel depressed on Saturdays, Sundays, and holidays. This strange situation is the result of (1) more time to think of one's self, and insufficient occupation with activities which normally force one's mind off one's self, and (2) the contrast between one's own feeling and the pleasures and relative freedom that he feels should be possible, and that others enjoy on these days. In manic-depressive depressions, giving patients cheerful and gay music or entertainment often deepens the depressive state because of the contrast, and the awareness of their own problem which prevents enjoyment.¹

On the other hand, the fear of being in crowds may be associated with the idea that others will come to know of the desires one is trying so hard to repress. Fear of small spaces or closed rooms is often symbolic to the patient of being trapped by his emotions and of his inability to escape. Miss F. M., subject to this fear, complained: "People trap me. I'm afraid I'll give myself away."

D. N., aged twenty-eight years, single, came in, saying that she was afraid of men, afraid to be alone, afraid to be in any small room, afraid of thunder, afraid she was going crazy, afraid she had many diseases, etc. The more her case was discussed the more it became evident that she had fears in almost every field of human activity. She was working as a private secretary, but because of her intense anxieties, could hardly manage to keep her position. She wanted to "run away from herself." Her family life was distinctly unpleasant. When she was two years old, her father deserted her mother. The patient could not remember a time when she was not afraid of her overly-strict mother. At an early age she was whipped so severely that the whipping stick broke. At seven, she was sent to a convent where her fearfulness caused a marked shyness which was interpreted as wilfulness; and harsh, disciplinary measures were applied. At eleven she was taken out of the convent, because the mother re-married. She felt unloved and unwanted. The tenets of the church were not taught her so much as they were "pounded" into her; and her fearful attitude made her think only of the negative aspects of religion, of sin, and hell, and guilt. A young man with whom she was going, and who had "serious intentions," would kiss her and "hold her close"; and the sexual thoughts aroused were to her unpardonable, sinful, and so intense that she stopped seeing the young man in an effort to get rid of these thoughts. However, the thoughts instead of ceasing, "irradiated," so that in the presence of any man she developed vague fears which sometimes produced a panic-like condition. The fears multiplied, and her "entire life was one mass of anguish." Her attitude toward life was that of fearfulness, developing inevitably out of her past, and coloring all phases from the most intimate sexual desires to the most impersonal letters she transcribed in her work.

¹ *Vide p. 404.*

The reaction patterns which grow out of conflicts represent the person's attempt to deal with the situation. If training has been improper or inadequate the patterns may be both immature and unhealthful, resulting eventually in inefficiency and unhappiness. The reaction patterns may, moreover, seem inconsistent and incongruous, if one fails to remember that each stimulus carries with it innumerable connotations and associations.¹ *The behavior which the doctor would call a symptom of disturbance is for the patient a concrete way of meeting a specific circumstance.* To the outsider the behavior appears inefficient and unrealistic; to the performer, meaningful and essential.

Mr. E. G., aged twenty-three years, was observed standing about the ward at 3 A.M. moving in the most peculiar manner. He would bow, and then step high and twist and turn. He would move his arms in a peculiar manner, and make sudden and quick motions, after standing still for awhile manipulating his fingers.

These actions were labeled just peculiar mannerisms. They seemed irrelevant, absurd, and without reason. Yet they were a reaction pattern which later the patient explained. "You see, there was this woman down the street who was trying to tie me up. All night long she wove these radio wires, and I could feel them tightening up on my legs and body. I got up and tried to untangle myself, and the more I tried, the quicker she spun. She got tired of it finally, but I still got the electric shocks."

His reactions in themselves were peculiar, yet to him they represented one means of escape from his imaginary torment.

Mr. S. U. was standing on the walk leading up to his ward. He was smiling, while making peculiar motions. With his left foot he was tapping on the ground while with his hands he would thrust suddenly ahead, hold still, and then thrust again. His actions were described as mannerisms and stereotypes. Yet they were also a reaction to certain ideas.

"Well down deep below where my foot is, is a cell. They're going to lock up those guys who are after me. Only the cell ain't ready yet, and I'm poundin' in the steel rods, and rivetin' them tight."

Mrs. B. T. was making circles in the air. She made this motion day in and day out. From the earliest moment of arising, she made these circles with her hand. It developed that the patient felt that she had committed an unpardonable sin, and in praying for forgiveness, began to make the cross in the air. As she increased her speed in making this sign, it appeared to be a circle.

To the person involved it matters little whether the ideas are based on fact or on imagination; his reaction patterns seem to him the best and most adequate way of solving his problem, however fantastic they may appear to others.

¹ *Vide p. 424 ff.*

There is always danger in attempting rigid classifications when one is dealing with aspects of personality; in so much as they of necessity remain highly individual, and each person's "case" has its own nuances and over-tones. The following discussion of some of the more common reaction patterns, therefore, is intended to be not so much exhaustive as suggestive and indicative. In general it may be said that most of *these mechanisms are "defensive" in nature*, and are designed to turn aside or render ineffective the dangers which the patient feels are threatening his security. The dangers are more subtle and more numerous than those which confronted primitive man, for they include all the elements of the environment which may threaten the ego.¹ The mechanisms employed to defend against criticism, for example, are in purpose identical with those used to ward off physical assault.

There are numerous symptoms which are expressed by other psychologic mechanisms. One of the commonest symptoms, for example, is the "*inability to concentrate*."² Most of the persons suffering from psychoneurotic disorders find it difficult to read any length of time or to pay attention to one subject very long. Their attention wanders. In addition, the memory seems impaired, and they "can't think as well" as they had previously. The reason for these symptoms is that the patients are overly self-conscious and pay excessive attention to these factors which they cannot solve and try to repress. Their worries and problems take up most of their attention; and as a result, external problems and subjects interest the person less than do his own; and the attention, even though started on a topic, wanders back. In other words, it may be said that the patient is able to concentrate too well, but on his own emotional self, rather than on that which he "chooses" to concentrate on.

*Indecision*³ as expressed in the complaint, "I can't seem to make up my own mind," has its basis, as a rule, in the existing conflicts. When there are strong and urgent problems which one does not know how to solve, or when there is conflict over some compelling desire which was inhibited by some intensive, restrictive force as of religion, there is much emotion associated with his inability to come to a conclusion.

The making of decisions is usually characterized by a certain amount of tension, the amount being in proportion to the values involved and the evenness of their distribution. For example, a man living in a community which he considers ideal so far as health

¹ *Vide* p. 45 ff.

² *Vide* p. 282.

³ *Vide* pp. 48; 413.

and social contacts for his children are concerned, but making only a meagre livelihood is offered a more highly lucrative position in a different locality. Since there are values to be gained and values to be lost whatever conclusion he reaches, there will "normally" be tension until a decision is reached.

Indecisiveness becomes pathologic when it irradiates to all of the processes of life. In depressive states indecision is common. Under ordinary circumstances, the depressed patient cannot make up his mind whether to buy something or not, to visit a friend or not, to go on a vacation or not; but the indecision may become so acute that some patients do not know whether to put on the right or the left shoe first, whether to lift the right or left foot first in stepping on a street-car, etc.

"I feel in a daze," is another common complaint. The patients are in such a state of conflict and indecision that they cannot think clearly, and appear to be "in a daze." Similarly those who complain that "everything seems unreal to me," are in a "daze" with an emotional clouding of consciousness. Reality appears almost meaningless when the entire mental life is occupied with all-pervading conflicts, and when the phantasy formation is in the ascendancy.

The sensation of being tense, the fact that persons may "Try so hard to relax but can't,"¹ is also the result of the emotional tone associated with problems or conflicts. The continual awareness (even if the awareness is "unconscious") of possible dangers produces in the organism a state of preparedness to meet danger; such preparedness consists of alertness, tension, and energy mobilization.²

The very fact of trying hard makes relaxation difficult. Relaxation implies the absence of effort. In relaxing, one "lets go," and *permits* ease and comfort to come; it is impossible to *force* it to come. The phrase, "You *must* relax,"³ is a contradiction in terms. Moreover, physical relaxation is primarily a product of "mental" relaxation. Physical tenseness is the result not of local irritability but of general irritability. Such a general pattern of response as muscular tension has its origin in emotional tension; and these attitudes of tension should be "relaxed" in order that physical relaxation may occur. The good results reported from physical relaxation are primarily the result of the fact that the persons' *attitude* of tension was released. Being at ease implies peace and quiet and the absence of concern. Therein lies the real benefit.

¹ Vide p. 249.

² Vide Ch. XII.

³ Cf. E. Jacobson, *You Must Relax*.

As a matter of fact, one may be relaxed mentally, yet have temporary or localized muscular tension.¹ Some handball or tennis players are capable of almost drooping relaxation of their limbs during a game, until a moment before the ball is to be returned. On the other hand, business men, lawyers, etc., are often very tense physically without having done the slightest type of physical work; and it is very difficult to make them less tense, unless they can be persuaded to be less intense about their problems. Not only neurotic patients but also many "normal" persons show evidences of undue tension.

Oversensitivity.—It is against a background of oversensitivity² that most defense mechanisms are developed. Oversensitivity which is commonly characteristic of unstable persons may manifest itself in a variety of ways, but is always grounded in a sense of insecurity. This feeling of insecurity may be produced by chronic irritation or by a sudden and intense irritation later in life. In the vast majority of cases, it has its origin in a lack of security during the formative years.

Oversensitivity is characterized by: (1) an over-emphasis on *the person's inability* to meet difficult situations (hence the development of egocentricity and concern about one's self, and of the inferiority complex); and (2) an over-emphasis on *the difficulty that exists*.³ Many persons will feel inferior in situations which to another would represent security; the difference lying not only on the level on which security has been placed, but also in the sensitivity to supposed danger. The multimillionaire who has placed his level of security very high feels insecure if his income, having been taxed heavily, is consequently reduced to a mere million or two. On the other hand, the man-out-of-work, whose level of security was very low, feels secure enough to be married when he has obtained a job on W.P.A. The emotional disturbance in both these persons is affected by changes in the environment, but this in turn depends upon their pre-conceived ideas and attitudes toward the environment. To understand the oversensitivity of any person it is therefore necessary to understand not only his environment at the time, but his early environment and his attitudes.

Sensitivity is expressed in many ways. "I am always self-conscious"; "I seem to have nothing to say to people"; "I'm ill at ease in the presence of others"; "I won't speak for fear of saying the wrong thing": all such statements are indicative of such

¹ *Vide* p. 255.

² *Vide* p. 213 (Case G. J.).

³ *Vide* p. 158.

extreme affectivity and over-concern about one's self as to interfere with the efficiency of one's actions. These characteristics have their origin in a sense of insecurity which manifests itself in many directions. One of the commonest complaints is, "I can't stop thinking of myself," or "I'm not interested in anything except myself," expressing the person's inability to shift his attention to other persons or ideas. Other mechanisms such as criticism of others,¹ over-emphasis on the importance of one's own ideas, an *ex cathedra* fashion of stating one's opinions, etc., likewise are indicative of a basic insecurity.²

Mrs. I. Q.,² aged forty-eight years, was referred by her brother who said he was driven to desperation by the patient's constant criticism and general "nastiness." His sister always had a sharp tongue, and she was irritable, depressed, and very emotional. She had been this way for many years. The patient was a fairly intelligent woman who not only admitted her brother's accusations, but complained of being aware of and yet unable to prevent her actions. She was conscious of the irritability of others and the displeasure of those whom she visited; and though wanting to be liked, she could not forbear from making cutting remarks and insisting upon her own opinions. She had one younger brother. Her father was a wealthy and prominent man who could afford all luxuries, while her mother was "stingy" to the point of returning for cash the gifts given her by her husband. The patient loved but envied her brother who though younger quickly drew ahead of her in school. Both by implication and directly she had been told that she was "dumb and ugly." She wanted to be admired and respected, and having set her goal as brilliance and beauty, was attempting to achieve an impossibility. Her feelings of inferiority were accentuated by her mother's constant urgings and criticism. The mother also was "embarrassed" at the backwardness and awkwardness of her offspring. She was constantly correcting the patient. The patient, whose ego was being constantly attacked, sought to salve her pride by finding fault with others. Eleanor received good grades because she was teacher's pet; Florence had boy friends because obviously she was a hussy, etc. So uneasy and unhappy was the patient that the feeling of inferiority manifested itself constantly. She not only became irritable and hypercritical, but began to boast what she could do and how good she was, in an effort to defend herself against the constant criticisms which in early adult life had begun to emanate mainly from her own conscience. An added blow which she has never forgotten was the marriage, arranged by her family, who despairing of her ever finding a husband, enticed a young salesman in the father's store to marriage. The marriage resulted in two children, was unhappy, and was a constant reminder to the patient that she had married beneath what she considered her station. She began to grieve over her lot and spoke constantly of her disappointments. As a result of this reaction pattern, she became emotional, developed trembling of the hands, poor sleep, and temper outbursts. Ironically enough, her elder daughter was a mirror image of the patient in looks as well as in thought;

¹ *Vide p. 272 (Case I. L.).*

² *Vide pp. 77; 314.*

and to the observer it was evident the daughter was subject to the same merciless criticism by the patient.

This woman became very critical, egocentric, and subjective, as reactions of defense against intense criticism brought to bear upon her first by her mother and then by herself. At the same time she identified¹ herself with her mother and assumed a similar reaction pattern of criticism towards all persons as did her mother. Identification and internalization is a normal process—but when used excessively produces a neurosis. Efforts by the patient to control these symptoms were doomed to failure until the basic reaction patterns of inferiority and resentment and the identification plus the ambivalent rejection of the mother were resolved.

It is an extremely common finding that persons who are very critical of others, suffer from the very faults they are bitter about,² and that children who are a trial to their parents very often express those irritating qualities which are found in the parents.

By being *self-conscious*, the person may be expressing his awareness of and inability to escape from his internal conflicts. In other words, his consciousness over his appearance, his words, his actions is but an indirect expression of his basic feeling of inadequacy and inferiority, often existent since childhood. Normally, feelings of inadequacy are present in children and adolescents, but excessive self-awareness should disappear with the increase of social contacts and social situations. Every "normal" person has a certain amount of self-consciousness, and desirably so; but in oversensitive persons this attitude is all-pervading. Most commonly it is the result of an instability and unsureness established in the child by his environment. Constant blame, nagging correction, feeling unwanted or unloved, demands beyond capacity, the suppression of normal tendencies: all tend to establish the pattern of uncertainty. Once the *pattern of insecurity* is established, it will tend to color all future reactions, regardless of how successful the person may be. The mind of the child is plastic, and impressions made upon it form grooves and ruts, which harden and last throughout life-time. Once a pattern of insecurity has been set, thereafter every attempt, even in the most simple situations, is accompanied by the "premonition" of failure so that the completed undertaking is always regarded as unsatisfactory in one way or another: in memory of childhood tasks which were continually criticized for flaws. Inferiority feelings when based on such early training tend to be general and all-pervading.

¹ *Vide* p. 77.

² *Vide* p. 207 (Case T. C.).

Such feelings as inferiority and oversensitivity are the basis for statements like—"It is hard for me to make friends." Persons who make such comments are too timid to make the necessary social gestures, and at the same time are so self-concerned that everything that is said is taken to have personal reference. They are "ill at ease in the presence of others" for the same reason. They "analyze" themselves constantly in a vague and generally poorly directed attempt to find the reason for their social failure. In extreme instances, this self-analysis and awareness may reach the point where the patient is "conscious of every movement he makes"; *e. g.*, "If I lift my hand to my face, I feel aware of it, for no reason at all." The oversensitivity may develop to the point where the patient "will leave the room whenever friends or company come."

Such attitudes of inferiority and sensitivity are generally ingrained from childhood, but they may develop later in life. Failures in accomplishment will bring on these attitudes, only in proportion to the degree to which the person evaluates and emotionally identifies himself with the failure. When there is much blame heaped on a person for a failure, whether it be outside blame or self-blame, then feelings of inferiority develop.

Self-blame,¹ another expression of over-consciousness of self, may be the result of inability to achieve desired goals and ideals; or, more seriously, the result of failure to solve conflicts. Here again the factor of irradiation (spread of emotional turmoil from one to other related or unrelated objects or facts) operates so that these patients blame themselves for failing in trivial, inconsequential tasks, or insist that they are responsible for various ill-fortunes. The basis is a feeling of self-blame over some internal conflict. There is intolerance of having faults, and of failure to achieve goals and ideals. Too often these persons have not crystallized their vague, indefinite desires, and strive aimlessly without any understanding either of their limitations, or the manner of possible further development.² Such persons may expect of themselves an "iron will," machine-like perfection, and irresistible and immovable determination.³ They are usually doomed to failure, and so are left with self-intolerance and self-blame.

Mr. U. K., aged thirty-four years, complained that though he had many college credits, he didn't get the kind of position he wanted. He worked at places only a short period of time and left to seek something better. He wanted to be recognized as being "someone," and to be "looked up to." For

¹ *Vide* p. 206 *ff.*

² *Vide* p. 208 *ff.*

³ *Vide* pp. 215; 276.

over ten years he had been attending one of the night colleges. He started first in English, intending to be a teacher, but after a year and a half lost his interest and decided architecture would be better. However, the second semester of drafting was too difficult, and he changed over to law. This interested him and he did well until he spoke to some practicing lawyers who painted a black picture, whereupon he quit the law course in the middle of the semester and was studying civil engineering at the time of examination. His work record was about the same. He would start to work with a "feeling" that there was a future, and after varying periods of time would become discouraged. He blamed himself for being "dumb" and unintelligent, said his personality was at fault, that his face had too many pimples, etc., etc., all as excuses for his not "being looked up to."

Other factors may bring about similar tendencies. Boredom, for example, is evidenced by persons who are chronically dissatisfied:

Mrs. I was a pouting type of woman who insisted on having her own way. Although her husband could not well afford it, she had a maid to do all the housework, and she did nothing. A hysterectomy for a fibroid tumor prevented the distracting influence of children. She waited all day long for her husband to come home, and when he did, fatigued and preoccupied with affairs of business, she was eager to go out for a good time. She wanted conversation, brilliant wit, engaging and entertaining activity; and not receiving it, felt frustrated and began the self-sympathy that led to constant concern over her physical and mental state, to feelings of being unloved and unwanted, and to constant self-blame.

Oversensitive persons, on being criticized, may become despondent, or they may become unduly irritable. Often they interpret the slightest gesture as being adverse criticism; and not uncommonly consider a lack of praise as being a direct insult. The more inadequate and inferior one is, the more potent and devastating will criticism be; for it confirms, as it were, and emphasizes one's own feeling of inadequacy and one's sensitivity to it.

The more common mediating mechanisms are of a defense pattern, developed to protect one from real or imagined dangers. The greater the oversensitivity, the more the defense reactions need to be called into play. *These defense mechanisms are substitutes* for a direct attack on the problem or conflict and because of their indirection lead to subsequent problems. Moreover, persons can become so sensitive that experiences long past may still continue to act as an irritant, and thus call forth defense symptoms.

Other mediating mechanisms include: *repression; defense by criticism; withdrawal; negativism; projection; phantasy-formation; attention-getting; identification; sublimation; conversion; irradiation; fixation; regression; ambivalence; dissociation; and compensation.*

It is often difficult in actual cases to isolate the mechanisms in

pure form and the categories themselves are so over-lapping that any one symptom may be described under several categories. Moreover there rarely is a person who exhibits a single mechanism to the exclusion of all others. Many so called normal persons will use these mechanisms at one time or another. The case histories that follow are taken directly from my records; and the mechanism illustrated is shown as it "usually" occurs among patients.

Repression.—Repression is one of the most common methods of dealing with over-irritating memories. Repression is a dynamic forgetting,¹ *i. e.*, the irritating material continues to be regarded as irritating, but is put out of consciousness. Repression does not permit true forgetting.

Mr. H. I. had his leg amputated at the age of fourteen, because of a sarcoma. At the age of twenty-two, he was irritable, had acute feelings of inferiority, was very self-conscious, and "hated" girls. His artificial limb was almost perfect, and he walked with only a slight limp.

His over-sensitivity to himself and others was based on the feeling that he was a cripple, the term cripple implying for him some hideous deformity which no self-respecting person, particularly the opposite sex, could tolerate without a shudder. He could not "face" the fact of his amputation and allowed it constantly to irritate him. He refused to think of (repressed) his amputation, while at the same time reacting violently to any association connected with his difficulty. His feeling of self-consciousness, and inferiority followed; his bitterness caused him to resent the imagined pity of girls; and although he gave many rationalizations, he could not explain convincingly his antagonism.

Whenever facts or possibilities are too irritating, the person tries to protect himself by removing them from his consciousness; unfortunately, these irritations may be removed just from immediate consciousness, but they are not really forgotten and so continue to act. Repressed emotions can be removed only when one's *attitude* changes toward the irritating material.

It must be remembered that that which is repressed is said to be in one's "unconscious mind" and is not forgotten. The person may not consciously think of it, but the memory forms a background which emotionally colors all his reactions. It may assert itself when the person is apparently "thinking of nothing." This phenomenon is important. Many patients will state, "My mind was blank when I got this feeling," for they do not realize that their repressed memories are just outside the door of consciousness (*i. e.*, technically unconscious) and make themselves felt "even when the mind seems blank."

¹ *Vide p. 70.*

Mrs. X. F., aged thirty-five years, married, with a child of three, complained of having had blushing spells for six months. The blushing was associated with a great deal of embarrassment and made her feel "almost hysterical." Examinations revealed no organic difficulty, and all sorts of "salty and other kinds of medicine" could not change the symptom. The patient was feeling desperate. It had even been suggested that the sympathetic nerves to the face be cut; and she was seriously considering the operation.

When an effort was made to find out the underlying psychopathology, the patient denied any difficulties. She was married to a nice, pleasant husband who made a comfortable living. She had a beautiful child and a comfortable home. There was nothing she could think of that bothered her.

Nevertheless, such denials served to emphasize the intensity of the repression. After she had been questioned further, the following story came to light. The patient was married at the age of twenty-six. She was a quiet, shy person who had been brought up in a religious atmosphere. She was more content to be with books than to be with people. Her husband was the opposite type of personality. He was sociable, had a large circle of acquaintances, liked to go out on parties, and associated with a group of persons whom his wife termed "roughnecks." Six months prior to her first consultation, she discovered that he was unfaithful to her; and what made the matter worse was that the indiscretion had occurred with her own sister. For days she seemed in a daze and could not reconcile herself. She condemned herself for not having gone out with him sufficiently and at the same time began to be excessively irritated at everything he did.

One month later, while she was at one of "his parties," and while playing bridge, her partner let out an oath on a false card play. She began to blush, and felt so self-conscious that she had to leave the table. Thereafter, whenever she thought of the incident she blushed; and finally it came to the stage where the blushing was continued even when "her mind was a blank."

Psychotherapeutic procedures (*que vide*) were instituted, and the patient was asked to return the following week at which time she stated her condition was unchanged. The next week in the clinic, and before a group of students, she was asked about her symptom. She replied that she had been free of it since the first visit. When asked why she had made the statement the week previously that the blushing was unchanged, she replied, "Oh, I wanted to be sure that it was really gone."

The unfortunate incident which started this difficulty remained as an irritant in the patient's unconscious mind. She refused to think of it consciously or to face the fact that it had occurred, and that wherever the blame might be, she had to accept the fact and attempt to do something about it if she desired to continue her married life. She repressed the memory of the incident, which is to say she allowed it to rankle her continuously, although she avoided consciously facing it. The irritating repressed memory was, however, constantly in the background and made her feel irritable. She had already repressed the knowledge of her hus-

band's infidelity when she heard the oath at the bridge table. The oath was all that was needed to start the blushing. The blushing continued, not because of the oath, but because of the background described. Insincerity was so much a part of her personality that she even refused to admit absence of her blushing on her return visit. The patient was relieved of her symptom of blushing because she came to understand the significance of the symptom and changed her attitude toward the irritating factor. Her pre-neurotic personality remained unaltered, however, and therefore subject to further neurotic complaints under appropriate stress.

Dynamic Forgetting.—Dynamic forgetting is in reality a subdivision of "repression." One has a tendency to "forget" when one owes money, or intends to do some distasteful task. Names of persons whom we dislike, objects that irritate may slip from memory. These items are not really forgotten, for by dint of suggestion or special technique they come to the fore. It is common to note that a "forgotten" item comes to mind long after its need has disappeared.

Mr. K. N. was disgusted with his wife. He was young when he married her, as the result of active pursuit on her part. He was flattered and praised and made much of it; and the marriage occurred without his having any real affection for the girl. He continued to live with her and had three children; but not only was he not fond of her, but there was active dislike.

For the anniversary of his marriage, his wife gave him a sport shirt. He disliked it, primarily because she had given it to him. He asked his wife whether she minded his exchanging it for another shirt. He carried the shirt with him and "forgot it" on the street-car. He suggested that the real reason he forgot the shirt was that he didn't want it; and he did not call the lost and found department of the street-car company, because "I'm afraid they might have found it."

Attacking or Criticizing Others.¹ — This defense pattern grows out of a desire to ward off attacks before they can be made; *i. e.*, to hurt before one can be hurt, or out of the necessity of an outlet for one's own irritations. Not only is "attack" the immediate response, but the holding of a grudge is its corollary and its continued response. Such persons hate "anyone who criticizes me," and find fault with everyone.

This inability to forgive and to forget coupled with the desire for revenge is a basically immature and childish reaction. Grudge-carrying has the effect of constantly producing emotions of fear and rage which in turn have their physiologic concomitants in

¹ *Vide p. 64 (Case I. Q.).*

increased secretion of adrenalin, rise in blood pressure, tachycardia, etc. Hate is after all just chilled fear, for one hates that which might harm one; and the chronic fear (and its reaction hate) may be directed at its cause, or through displacement, at an unrelated object. Hate is an emotion which inevitably acts as a boomerang on its owner.

F. I., a man aged twenty-nine years, was still living in his childhood. "My whole early life was one of abuse. I was made to do all the dirty work around the house, was constantly scolded, had to clean the horse, polish the buggy, sell papers, wash dishes." He was never allowed to play with other children and was constantly criticized. "I was always told I was 'dumb' and never could learn anything." At least once a day physical punishment was administered. Now in adult life, he still carried the resentment not only against those who were unkind to him in youth but to anyone who, even in the friendliest fashion, advised him.

He was "getting even" with the way the world had treated him by treating others in the same way. By finding fault with others, he unconsciously criticized others before they could criticize him. In addition, his actions were imitations of others and were part of the reaction pattern he was trained in.

Often nagging, hyper-criticism, fault-finding are used as a safety-valve for pent-up emotions or chronic irritability, and are evidenced in persons with insight by such statements as: "I stay mad at anyone who irritates me in the slightest way"; "I'm always picking on my husband"; "I'm very mean and not really livable with my husband."

There was the employer in an emotional storm over his own conflicts who scolded and then discharged a young man who he admitted was brilliant, but who shuffled his feet and "must, therefore, be worthless." This employer needed an outlet for his own unrelieved tension; so focused on some object or action which made him angry. There was, in addition, the sadistic satisfaction derived from being able to inflict pain, just as pain was he believed inflicted on him.

Mrs. N. D. was intelligent enough to know that her statements were contradictory when she said, "My husband's so good to me. He gives me everything I need and want; he is attractive and social. Yet I'm constantly irritated by him and am always picking on him." Inquiry into her background revealed three causes of her irritability. She had loved another man who had rejected her. Her marriage was to "show him that he was not the only fish in the sea." In addition, her parents disapproved of her husband who they said was her social inferior. Finally, sex relations (conditioned by the above factors) left her completely dissatisfied. Thus though she "con-

sciously"¹ accepted her husband, her frustration was sufficient to cause the irritability manifested toward her husband.

Mrs. F. X., aged twenty-four years, came for relief from physiologic disturbances, and in her talk revealed clearly not only their basis but the cause of her excessive irritability: "I have a choking sensation in my throat, and pains in the chest. No doctor or x-ray has been able to find the cause. When I get sick, my breathing goes 'haywire.' The choking sensation in my throat comes on. Then I feel nauseated—it seems like there is something at the end of my tongue. I get short-winded and can't converse. My voice seems to grow weaker. I get chills up and down my spine and head. I can't relax, can't sleep, get diarrhea one day and constipation the next. I have pains in my stomach, and went to twelve doctors in the last two months, but no one can find the trouble. I can't take a deep breath, and feel so miserable as if I were going off my nut because of constant thinking." Inquiry revealed that her "constant thinking" was about her mother-in-law's "meanness." The following words indicate the depth and bitterness of the resentment she felt.

"How mean my mother-in-law used to be to me. Why she was so mean we had to get married in court without telling her. She said she'd kill herself if her son married. After we did get married there was more trouble with her because we weren't married in church. She's a nag and insanely jealous. She'd tell me about actions before his marriage, how he couldn't live with one girl, and didn't really care for me. She puts crazy ideas into my head. 'Are you worrying where he is now?' she'd keep saying, until now when I wait for my husband to come home and he is not exactly on time I get panic-stricken and think maybe he is out with another woman; then I can't eat. She was jealous when we didn't live with her and unhappy because I won't call her 'Mother.' She tries to get all she can out of him, and every time we leave her home we quarrel. I know I'm mean and not livable with my husband but it's her fault. She's caused every aggravation I've ever had. She tries to be nice to me now, because she knows she's the cause of my illness; but I hate her, and it won't help now."

The effect of her intense emotion on her physical organism is obvious; and it can easily be seen why this girl developed chronic irritability which she vented on her husband, who, incidentally, while realizing the situation still was closely attached to his mother, and thus intensified his wife's irritability.

² **Withdrawal.**—Withdrawal² as a protection against possible hurt is a common pattern of reaction. If a situation becomes too irritating a person will remove himself from it. Such withdrawal would not be unwise, though it is usually better to face and fight out such irritations, were it not for the fact that so often it is not

so much the situation itself, but rather the patient's attitude which causes his irritation. This attitude may or may not have been conditioned by some unfortunate experience; and if it has, the subject fears repetition. There are many young women, for example, who will not permit themselves to become fond of anyone, because they were deeply wounded on losing someone whom they loved dearly. There are other persons who refuse to talk about or even to think of controversial topics so as to avoid feeling "upset." Still others sequester themselves from society, because of the turmoil, strife, and obligations inherent therein.

Withdrawal may be physical, the result of simply staying away; or it may be psychologic, the result of "refusing to pay any attention to." In the latter situation it may lead to refusal to face the facts of a situation; to introversion; and the seeking of satisfaction in phantasy and in auto-erotic behavior; *e. g.*, masturbation.¹

One patient, married, aged twenty-eight years, stated: "I want to run away from myself." She had set up her father as an ideal, and had married a man who fell far below this ideal. In addition, she was in love with a man who was married to someone else, and sex relations with her husband were unsatisfactory. She was constantly torn by these conflicting emotions and "could not get away from herself to forget."

Withdrawal from one's self is very difficult. One can not run away from one's own conflicts. Patients who seek to solve internal problems by leaving home or by taking trips must learn that solution can come only through changed attitudes and reaction patterns.

Many youths come with the complaint of "What's the use?" Their feeling of futility is the result of inability to solve the conflicts and the turmoil within them. The conflicts may be over specific difficulties, and the feeling of futility in trying to solve a particular difficulty radiates to include everything in life. Tensions at home, desires for independence, ambitions: all or any may be at the bottom of the general futility. They "give up" the struggle and *withdraw* into a realm of self-pity.

Mr. K. B. did not speak with his mother, father, or elder brother. When he came home from school, and later from work, he offered no word of greeting and received none. He would get up out of his chair at the dinner table and walk to the other end to get bread or salt, rather than speak to them. He was irritable, unhappy, and "hated" them, yet still kept on living there. He tried to withdraw from contact with them because of fancied and actual insults.

¹ *Vide p. 108 ff.*

This problem of not speaking to members of one's family¹ is unfortunately fairly common, and is an attempt to withdraw, as well as in some vague way to hurt; it is an inferior and immature way of handling a situation. Incidentally, it throws light on the emotional reactions of the other members of the family. Persons who withdraw are usually shy and sensitive and have a feeling of being unloved and unwanted. Their wishes are satisfied in day-dreams; they are uneasy and unhappy when confronted with reality. They "feel 'lonely' even in the presence of others," and not infrequently they "leave the room when company comes." They tend to "avoid 'sad' movies and 'emotional' stories, and even refuse to read the newspaper because it has so many items 'about death and suicide and horror'." Statements of this sort are frequently heard in conversation with these patients whose only mechanism of defense is withdrawal. When emotional instability is great and the sense of conflict intense, then any additional emotional disturbance, even so remote a one as reading of an accident in a strange part of the country, is sufficient reminder of personal difficulties.

Miss F. M., aged twenty-eight years, complained of being more or less constantly depressed and of feeling almost hopelessly inadequate for the ordinary routine of life. Ever since childhood she had felt tired and inadequate. She believed she was ugly, and so kept away from people. She became very lonely. She admired one girl and imitated her in all vices and virtues in an effort to be like her. She wanted to be loved by "anyone" so that she might feel more worthwhile. Her work was efficient, and she was in charge of a small office force; yet she fancied her employer thought she was inadequate. "I don't have a feeling of belonging. I always compare myself with others and find myself wanting. I am so tired and am always afraid, but no one knows it. I can't sleep nights thinking over the little things I said or did that were wrong and which might have been left unsaid, or done in another way. I've cried myself to sleep often, but even in sleep had horrible nightmares. Boys go out with me, but I often feel they really don't care for me. My reason tells me I over-emphasize many of these thoughts, but I can't help it."

Her home life was the basic cause for these feelings. Her father was a weak man, living on a war pension, dominated by a nagging, dissatisfied wife. There never was a kind word spoken. The children were punished—often unjustly, and often as an outlet for the parents' pent-up emotion. There never was any feeling of love or of affection. The patient was told she was spoiled and petulant and ugly. Constant pressure of this sort forced the patient to withdraw into herself, and even at the age of six and seven she remembers crying herself to sleep. At seven, she found that she could get some pleasure from masturbation, and this she continued for many years, feeling intensely guilty over the act, and yet being unable to restrain

¹ Vide p. 195 (Case K.).

herself. She expressed this conflict by saying it had "a horrible fascination" for her. So deeply ingrained were her feelings of being unwanted that neither her work nor her social successes meant anything to her. She constantly felt inferior.

Conversion.—Conversion is a mechanism in which psychologic states are expressed symbolically by physical reactions. Thus paralysis, anesthesia, aphonia, tubular vision, etc., may be without organic basis and may rather be expressions of the patient's anger, fear, conflict, or other emotionally toned ideas. Ida D. converted (expressed) in a paralyzed arm her resentment over her mother's violence.¹ L. converted her general dissatisfaction with life, her mother's domination, and her failure to get married by paralysis of her legs.² D. W. converted his refusal to leave his daughter-in-law's home into astasia abasia.³

Mr. S. Z., aged seventeen years, complained of terrific pain in the back of his neck. He was brought to the psychiatrist, because no organic pathology could be found. His mother explained at great length about her son's debility and showed much concern. The boy finally was able to tell his story in the privacy of the office. He was a healthy, normal youngster who desired to do all the things ordinary boys do. He wanted to play, ride, play ball, and be on his own. His mother was very fearful, however. He might strain himself if he played too violently. He might be injured in the ball club; and she would discuss at great length the danger of "swimmer's cramps," etc. She was, as his boy friends termed it, a "pain in the neck." The boy's pain in the neck developed as a conversion of the psychologic "Pain in the neck"; and both disappeared when the situation was explained to the mother and son, and the mother withdrew her octopus solicitude.

Negativism is not so common in the neuroses as in the psychoses. Children may on occasion be negativistic. Patients who are negativistic will do the opposite of what is asked. Schizophrenic patients will often do the opposite of what is expected of them. This reaction pattern tends to arise, on the one hand, out of the desire to assert one's self; and on the other, from the need for revenge, or of "hurting those who hurt."

Mr. N. T., aged twenty-seven years, was seen at the request of his mother. N. T. was not informed of the physician's visit, because he refused to see anyone. He had just come back from New York City and had gone to his mother's home. He secluded himself in the attic and slept on bundles of old clothes that were permeated with a stench. He even slept in these clothes. He refused to eat food cooked by his mother, and on receiving a \$10 gift from his sister, bought a case of several hundred oranges, and after tasting one threw the rest away. He went to great lengths to do the opposite not only of what his mother told him to do, but of what he "felt" his mother wished him to do.

¹ *Vide* p. 35.

² *Vide* p. 39.

³ *Vide* p. 36.

Rationalization.—Rationalization¹ is utilized in everyday life, and is in effect the person's invention of plausible reasons for doing that which he wishes to do even though he knows they are not the real reasons. Rationalization is a method of justifying wishful thinking, a means by which one provides himself with a fallacious reason which permits him to escape facing the real issues involved.

In the examples cited above where hate or irritation is vented on another, the real reason for the emotional outbursts is usually hidden and the person justifies his symptom by the invention of a socially acceptable and ego-maintaining "reason." Mrs. I. Q.² vented her feelings of envy and inferiority on her more successful friends; but she "said" she disliked them because they were vain, or sly, or unfair.

Miss V. W.,³ aged twenty-three years, fought violently with her family. She would throw dishes at them and call them all sorts of names. She said that they had never taken proper care of her, that they had engaged a poor doctor to sew up her harelip, that they didn't acquaint her with the right friends, etc. She had, at the age of nineteen, fallen in love with a young man and had pretended she was wealthy. When he found that her father was a simple laborer and had no funds, he left the girl for another. Since that time, she blamed her parents for his desertion, even though it later developed that he was a thief.

It appears that the human machine needs to maintain its pride (*i. e.*, its security), and any idea which tends to break down this pride or security must be resisted, even if the resistance is but a false and flimsy front that merely shuts the danger from view without really curbing it. Rationalization is thus used. It is an immature and ineffective way of dealing with any situation. Miss V. W. blamed her rejection by the young man upon innumerable incidents which had no relation to his action.

Projection.—Projection is a mechanism by means of which the person refuses to face his own fears and desires, and instead believes that they emanate from someone else. In its most serious form, it is seen in the schizophrenic patient.⁴ Delusions are often the result of projection, and when a patient hears a voice coming from the next room saying, "You are a common criminal," he has projected his own conscience. An old-maid matron of a girl's school was projecting her own desires when she forbade one girl to wear pajamas and her roommate to wear a nightgown, since wearing such clothes suggested to her a sexual relation.

¹ *Vide* p. 127.

³ *Vide* p. 485.

² *Vide* p. 64.

⁴ *Vide* p. 437 ff (Case A. L.).

Such projections may show themselves in many ways and may become involved, complex, and seemingly ununderstandable. The patient who said, "I dislike persons who are free and easy," could find numerous rationalizations for his feeling this way; but fundamentally this person was, as most such are, very inhibited. Seeing others who express themselves in an uninhibited manner arouses in them, or makes them more aware of, their own desires. As a result their inhibitive tendencies are called into stronger play, and this situation is irritating. They project not only their own desires but their own inhibitions of them. The dislike of others' freedom is but a projected irritation and dislike of their own inhibitions, and in a complicated fashion, an associated tendency to dislike their own desires because the inhibitions tell them "they ought not to like it."

Identification.—Identification¹ is the process of assuming the characteristics and emotions of another person, or of an ideal. Some patients assume the troubles of their parents; the daughter, for example, suffering all the anguish of the mother who may be in difficulty. In some instances, the child may feel actual pains complained of by the parent. Identification with some older person who is considered a community hero is common among adolescents. Gangs as a whole may come to express a certain type of morality with which each member identifies himself. Boy scouts may carry out acts which are considered as "noble"; members of a city gang may refuse "to talk" about who shot them, because they have so identified themselves with the prevailing morality of the group that it is impossible for them to act as individual persons; but always their performance must reflect the group ideology.

Psychoneurotic patients not uncommonly identify themselves with their parents,² and imitate their behavior; or identify themselves with anyone who seems to be in trouble, and assume all the woes of that person as their own.

Mrs. I. Q.,³ aged forty-eight years, had suffered from a life-long psychoneurotic personality, with many symptoms of instability. She cried frequently, spoke loudly, nagged constantly, and had many aches and complaints. Among other things she told of becoming terribly upset because she read in the paper about the accidental drowning of a child; of breaking down into tears because some friend of her's developed cancer; of suffering to the point of insomnia and inability to eat, because her sister's child had a bad cold. Her family and the relatives of the friends involved, told her that she suffered far more than they. In each of these instances, the patient identified herself with the one who was suffering, and suffered on occasion more than they.

¹ *Vide* p. 297 (Case A. S.).

² *Vide* p. 204 *ff.*

³ *Vide* p. 64.

Identification is based on primitive thinking,¹ the person feeling and suffering in a fashion similar to the one with whom identification occurs. Pity, sympathy, hero worship, and provincialism are some of the states based upon the identification mechanism.

In some, the ego is so starved for attention and recognition, that all manner of techniques are employed to gain them. These *attention-getting* mechanisms are found particularly in the child who feels unloved.² At first the child will attempt to do whatever he feels the parents like *and* which will gain their attention. In many instances, if one parent tends to reject the child (as in the case of a father who has only daughters and wishes a son) a special effort will be made to please that parent. Feelings of being rejected may be particularly acute if another child in the family receives attention. If attempting to please the parents does not gain attention, then the child may develop *temper tantrums*, preferring displeased or even harshly disciplinary attention to none.

Likewise in adult life there are persons who constantly strive to be the center of attention, and who will go to great lengths to develop some talent or capacity whereby to assure themselves of such recognition. Similarly, men have become political ringleaders, have led emotional cults, have been martyrs, etc., in order to satisfy their desire for attention and flattery. If attention cannot be gained by acts which are socially constructive, such persons may perform irritating and anti-social acts; for it is better, they feel, to be a despised hero than to be a nonentity. In some instances, the sense of loneliness, of being unwanted, and the inability to gain recognition and attention may lead to suicide.³

N. O., aged twenty-three years, had a great feeling of inadequacy. She quarreled, cried, and spoke dogmatically about subjects she knew nothing about. She tells of how her father wanted a son, and when she came, the second girl, he was very disappointed. He gave his children no affection and was curt and preëptory toward them. He did not notice them. Nora did everything in her power to attract his attention. She became the most notorious tom-boy of the neighborhood, and climbed trees and played ball as well as any male of her age. "I did it hoping he would pay more attention to me, but he didn't."

This girl went to great lengths to try to please her unreasoning and ununderstanding father.

Phantasy Formation.—Phantasy formation, daydreaming, or building castles in the air is normal in childhood and even adult-

¹ *Vide* p. 49.

Vide p. 133.

² *Vide* p. 53 (Case C.).

hood. When it continues in excess, or when it comes to be used as a means of escape from reality to the point where it interferes with living efficiently, it becomes pathologic. Daydreams are the stuff from which ideals are spun, and to that extent they have an enormous benefit to the human race; yet patients too often use them to wish themselves heroes, or to wish destruction of their enemies, meanwhile ignoring any concrete or factual methods of carrying out what they really wish. Schizophrenic patients typify the extreme, and have withdrawn so entirely into phantasy life that they disregard real life in its entirety.

Phantasing is not always concerned with pleasant topics. After a period of time, unpleasant memories and anticipations come to the fore, so that the phantasy then turns out to be a liability to the subject, for patients then begin to suffer from the distressing possibilities built up in their own phantasy.¹

Chronic worriers² who are always concerned about what may occur have developed this kind of phantasy. These persons have become over-sensitive to the possibilities of danger and instead of dealing with actual facts as they are, let their imagination "do its worst."

Problems should be solved by reason and not by emotion. Feeling tone, which, however, should be taken into consideration, often warps the decision and tends to result in worry. In worry, correct solutions are made difficult, because one confronts one's self continually with the same fact, "feels" the inherent emotion, and over-emphasizes the dangers that might possibly arise.

A second component of worry is the lack of courage to "face the situation,"³ and accept the fact of the difficulty. Too often when an unpleasant situation exists, rather than understand it and do something about it, there is the tendency to deny its existence and try to forget it by denying it.

Mr. K. N., for example, was greatly irritated with his wife. He developed a chronic resentment against her which gradually chilled and crystallized into a hatred. She was an undemonstrative type of woman whose interests were directed along social lines; he was an affectionate man who was idealistic and more concerned with ideas than bridge parties. He expected affection and interest in his affairs, and could not understand why it was not forthcoming. He took her lack of interest in his problems as a personal affront, and in turn became irritable, demanding, and domineering.

This man refused: (1) to face the fact that his wife's temperament did not permit what he wanted, and (2) to accept this dif-

¹ *Vide* p. 197.

² *Vide* p. 198.

³ *Vide* p. 209 ff.

ference and try to make the best of it. His resentment was productive of nothing but self-pity and a futile insistence that everything be done and perceived in his way.

Another way of expressing this same worry is typified by the statement, "I always anticipate the future." Here again the person is over-sensitive and phantasies excessively about the future. Basically, such persons are tense, unstable, and inclined to have other symptoms that go with a neurotic illness. Not only is there an excessive fear of failure, but as is the case where there is one extreme, the opposite emotion also tends to be present; and there is over-gratification at the slightest success or praise. The anticipation or the "worry" that occurs in these persons is not an "objective" facing of the possibilities of the future, but an emotionalism and apprehensiveness about the most remote possibilities of the future.

Dissociation.—Dissociation is present in cases of symbolic amnesia.¹ In these cases, one's usual personality seems to be forgotten and a "second" self emerges. This split is only an apparent one and is frequently the result of a "desire to forget."

Miss B. Q., aged seventeen years, was brought to the clinic in a complete state of amnesia. She was found at a church, in a disheveled state, and could not tell who she was. She spoke coherently, but did not know her name, her address, who her relatives were, how old she was, where she went to school, or any other fact about her past life. Her mental processes were otherwise intact, and she could read, write, and discuss specific problems intelligently.

Under hypnosis, the essential history of her past was brought to light. She and her sister lived with their widowed father. He was a domineering, sadistic person who demanded implicit obedience and exact accounting of the household budget. On the day the amnesia developed, the patient was given the money for rent, and when she arrived at the agency discovered the money had been lost. The fear and panic that seized her was so great that rather than go back and face certain and severe punishment—she "forgot" all about herself.

Such dissociation is an unconscious escape mechanism, but practically it is very difficult to differentiate from the more conscious malingering.

Ambivalence.—Ambivalence² is the simultaneous existence of ideas or complexes charged with opposite emotional tones. There may be love and hate, trust and suspicion existing side by side. There is lack of a stable balance between the opposing tendencies; and ambivalent persons oscillate between extremes. It is not uncommon to hear a story like that of Mrs. N. D.

¹ *Vide p. 39.*

² *Vide p. 204.*

Mrs. N. D., aged twenty-nine years, complained of the host of symptoms classified as anxiety attacks. She stated: "My husband is the best husband a person could have. He is kind and considerate; he makes a good appearance and supports me well. A woman couldn't wish for a finer man. But why does he get me down? (Patient cries.) I can't stand him around me. Yet I love him because he's so good to me and so considerate."

There was a strong incompatibility between the temperaments and interests of husband and wife. The patient vacillated constantly between her feelings of appreciation for his good qualities and her equally potent exasperation and irritation.

Ambivalence differs from *dissociation* which permits the existence side by side of diametrically or logically opposed ideas or actions. It differs from ambivalence in that it is not a vacillating reaction to a particular situation or idea but rather the holding of inherently inconsistent ideas. Usually this dissociation exists for a few ideas; but it may be so deep as to "split the personality." There are many persons who condemn or even demand severe physical punishment to a dull-witted thief, but are aroused to great indignation at cruelty to "dumb" beasts. Some "great scientists" who have contributed materially to the world's welfare and who insist on strict scientific procedure may entertain ideas of spiritualism. The basis for such dissociation is that one set of ideas is determined by what the person *wishes*, and on the basis of which he has rationalized.

Regression.—Regression is the reversion to infantile forms of behavior. Regression often occurs in old age when senile changes in the cortex are responsible for an impaired intellect. In these instances there is a development of what has been called euphemistically "second childhood."

Regression may occur, however, from psychologic difficulties. In the schizophrenic patient there is frequently a reversion to extreme infantile levels, with lack of control of the bowel and bladder. Occasionally the patient may regress to a vegetative state, be mute, unresponsive, even to pain, and refuse to eat.

In physical illness, one often witnesses the petty irritability and childish attitudes of otherwise mature persons. In this temporary regression, the patients whimper over slight pain, over lack of sufficient attention, require comforting and repeated reassurances as if they were children. True here as with other neurotic traits, the more emotional a person is, the greater the tendency to regression.

Irradiation.—Irradiation¹ is a psychological mechanism by means of which emotional tension associated with one person or incident spreads to include other ideas or persons that may be connected in some way with the turmoil, or that may simply be associated by being physically present, or against which or whom there may be some slight irritation from some other cause. A business man who becomes angry at the loss of an order may become angry with all his employees. The father who has just learned of the arrival of his first-born son passes out cigars and greets everyone cheerily. The emotional state irradiates from one focal point outward to many. Conversely, several points of reference in a given situation may be over-looked by the person who prefers instead to lay all blame on one source. This process might be called *convergence*. Many irritations flow inward to one focal point. Business persons may attribute all financial distress to one political figure or party; a disgruntled wife may blame her husband for all her irritations and unhappiness; a drunkard may say he is so because his wife doesn't appreciate him. This device is used politically² to divert people's anger to *some* "manufactured" incident. Many symptoms of displacement and projection originate in the mechanisms of irradiation and convergence.

In addition to the defense mechanisms by which we seek to protect ourselves against danger, there are many reaction patterns by which we obtain pleasures which are denied to us by the environment or by our own conscience. In many instances, it is actual pleasure that is sought; and in many others, it is a release of tension created by the inhibitions attendant upon social training. Each living organism has a certain amount of energy which expresses itself in the ordinary pursuits of living. Should this energy be thwarted and prevented from coming to the fore, tension results; for the energy has not been dissipated; it has only been compressed and stored up.³ As a matter of fact, *the greater the inhibitions, the more compressed and explosive the energy becomes*, and the more symptoms are created. Release of this pent-up energy or tension is pleasurable. It is difficult in any given case if not impossible, to tell whether pleasure is so because it is primarily pleasure-giving in itself—or tension-releasing.⁴

Moreover, pleasure is a relative term, its specific meaning dependent upon what the person considers to be pleasurable. The determining force is not so much the situation as it is the person's attitude. Pleasure tends to become a postponed feeling tone. For

¹ *Vide* p. 178.

² *Vide* p. 254.

³ *Vide* p. 245.

⁴ *Vide* p. 106.

example, the child does the unpleasant task of washing dishes for the "pleasure" of her mother's approval and gratification; or the adult takes pleasure in doing much and hard work, because of the anticipated pleasure to come when the work is finally completed.¹ There may, indeed, be more pleasure in anticipation than in realization inasmuch as the imagined pleasure may have many of the vague but pleasing feeling-tones which are conjured up in our dream state but these phantasied feelings are rarely realized in sharply defined reality.

Fixation.—Fixation consists of centering one's emotional drives on one idea, action, or reaction pattern. A person may have a "mother fixation" and be unable to express any affection toward any other woman; he may have a "racial fixation" and feel that all who belong to a certain race should be destroyed (or if he is a member of that group, be given an exalted place); he may be fixated on masturbation and be unable to enjoy normal sexual intercourse. In other words, such persons are tied by their emotional conflicts, and in an obsessive-compulsive manner persist in spite of reason in their "fixated" course. The fixation in itself is an immature, or pathologic reaction, although it may be justified by rationalization.

Persons may have a "fixation" at any level of development and not progress afterward. Immaturity is a fixation below the adult level, and various levels of immaturity may be maintained throughout life. Moreover, since fixation involves primarily the emotional connotations, there may exist side by side mature "intellectual" concepts about politics, business, etc., and immature concepts on life, love, or the pursuit of happiness.

There are some women who remain fixated at infantile levels as indicated by their constant use "of baby talk" even in ordinary conversation. There are men who take a childlike pleasure in being members of secret organizations and attach great importance to the "signs," "passwords," etc.

Many patients who are overly emotional remain fixated on a pattern of response begun in early childhood. Pouting, temper tantrums, carrying grudges, etc., are evidences of such fixations. Mrs. I. Q. shows many evidences of such childish and immature responses, though she has reached middle age.²

*Sublimation*³ is a mechanism for releasing to another outlet the energy originally directed toward the fulfillment of a goal. It does not differ materially from substitution. In civilized life, there are many desires which cannot be expressed directly and which need

¹ *Vide* p. 246.

² *Vide* p. 64.

³ *Vide* pp. 121; 253.

some outlet. A salesman of medical specialties tells of once having desired to be a physician but being unable to complete the course because of financial difficulties entered his field because, "It was as close as I could get to the practice of medicine." Music is an excellent form of sublimation, and almost any form of recreation or constructive enterprise may be listed as such. Some persons write poetry to sublimate their energies, and the world benefits thereby. Others invent, build, paint, or run large business enterprises as part of the same drive.

Mr. Q. M. suffered from marked inferiority feelings. He related, among other things, his invention of a special bicycle lock which would put an end to his financial difficulties. He had a small candy shop in a poor neighborhood, and feeling inferior, sympathized greatly with the poor waifs that came in. One day a child came in crying bitterly at having his bicycle stolen. So much did the patient take the child's crying to heart (identification) that he resolved to put an end to such stealing, and by dint of much application, invented a bicycle lock which was patented and which a manufacturer agreed to market. This man was capable of sublimating his suffering for the child into concrete action.

Compensation is a *substitution* process like sublimation but results frequently in *over-responses*. One may compensate for a short physique and its attendant feelings of inferiority by being dominant, aggressive, and loud-voiced. The blind compensate by a further development of the sense of hearing as well as their kinesthetic sense. Parents who struggled in childhood compensate by attempting to give their children "everything"—without understanding the deleterious effects. Such over-compensation is common, and it may be direct, as in the examples cited, or it may be indirect and via such mechanisms as defense, withdrawal, etc.

SUMMARY

It must again be stressed that the various mechanisms herein described are rarely found in pure form, and that any one symptom may be the result of several mechanisms. Indeed, it may be said that all these forms of psychologic activity are but subdivisions of the general tendency to "think emotionally"; *i. e.*, to utilize primitive reasoning by similarity and contagion.¹ All persons use some of the mechanisms at some time or other; and any individual person may be considered normal or neurotic depending upon the selectivity, intensity, and extensity of his use of these mechanisms.

¹ *Vide* p. 49.

CHAPTER IV

PSYCHONEUROTIC (TENSION)¹ SYMPTOMS DUE TO DISTURBANCES IN THE AUTONOMIC NERVOUS SYSTEM²

THE indecisions and conflicts inherent in many reaction patterns may find expression in symptoms of disturbed function of the integrative systems, including the autonomic nervous system, the cardiovascular system, the endocrine system, the postural system, etc.; or through psychologic mechanisms. The former symptoms have usually been described as psychoneurotic, simply because no organic etiology could be determined. The effect of emotion on the physiologic function of the body is too often minimized. Endocrine glands, for example, are influenced by emotion, as is commonly seen in lachrymation, salivation, menstruation, etc. Experimentally, Cannon³ and others have found that rage and fear are accompanied by increased secretion of certain glands, notably adrenalin. Dr. Irene Sherman and the author⁴ found that many symptoms termed psychoneurotic could be produced in normal subjects by the intravenous injection of adrenalin. Disturbances may occur in practically every part of the organism as the result of strong or chronic affective states. Much experimental work on human subjects has confirmed this theory. In this investigative work, extensive use has been made of hypnosis,⁵ in which state it has been possible to suggest that the subject feel fear, love, hate, or any other emotion; and by this procedure the effect of these emotions on the body has been determined.

The experimental work and the conclusions of investigators in this field of psychosomatic function are listed below. This state-

¹ *Vide p. 24 ff.*

² Although the autonomic nervous system is mentioned alone, the meaning implied throughout this book is that of the entire integrating organismal structure. The central nervous system, the vasomotor system, the circulating blood and its contents, the endocrine glands, and any other integrating mechanism is involved in varying degree with the autonomic nervous system. It appears probable, however, that the autonomic system via its ganglia in the periphery, in the hypothalamus, and possibly even in the frontal cerebral lobes initiate and correlate all other systems as related to emotional changes.

³ Cannon, W. B.: *Bodily Changes in Pain, Hunger, Fear and Rage*. (Appleton Co., 1929.)

⁴ Kraines and Sherman: *Neurotic Symptoms and Changes of Blood Pressure and Pulse*, Jour. Am. Med. Assn., 114, 843-845, 1940.

⁵ *Vide p. 227.*

ment is not intended to be in any way exhaustive, but simply to indicate a few of the fascinating correlations which are opening new fields of study.

METABOLISM AND BLOOD

The basal metabolic rate can, for example, be lowered by hypnosis. Numerous experiments have been done along this line. Gessler and Hansen conducted experiments with a subject lying naked in a room the temperature of which could be decreased. In one subject, with cooling of the room temperature to about 16° C., the increase in O₂ consumption was 11 per cent; with cooling to about 13°, the increase was 16 per cent; in hypnosis without suggestion, and the room temperature of 16°, the increase was only 4 per cent (instead of 11 per cent); in hypnosis, with simultaneous suggestion of warmth and room temperature of only 12°, the increase of O₂ consumption was only 3 per cent (instead of about 18 per cent). In other words, with hypnosis alone there was such a decrease in the activity of the heat regulating mechanism that (in view of the intense cold stimulus of 13°) one could call it an almost complete cessation of heat regulation.¹ These authors conclude that heat regulation depends not only on external conditions, but also on the subjective evaluation of the outside world.

Similarly, calcium content of the blood was brought down by hypnotic quieting, from 10.56 to 8.40 mg. per cent.,² and this observation has been confirmed a number of times. Ehrström concludes that psychic states that can be characterized as states of calm begin usually with a decrease of blood calcium, and periods of restlessness begin with an increase.³ Similarly, various investigators point out the influence of emotion on cholesterol, acid base equilibrium, and sugar metabolism.

The role of sugar metabolism in the psychoses is unclear; but Cannon's classical experiment showed that glycosuria develops in cats in rage, and that the promptness with which sugar appears in the urine is directly related to the emotional state of the animal. Cannon and his co-workers examined the urine of 25 Harvard football men after the most exciting contest of the season and found sugar present in 12.⁴ Interestingly and instructively, 5 of these positive cases were among substitutes not called upon to enter the game, thereby showing the influence of excitement even in the

¹ Gessler, H., and Hansen, K.: *Deutsch. Arch. f. klin. Med.*, 156, 352-359, 1927.

² Glaser, F.: *Med. Klin.*, 20, 535-537, 1924.

³ Ehrström, M. Ch.: *Acta med. Scand.*, 74, 378-395, 1931.

⁴ Cannon, W. B., *et al.*: *Am. Jour. Physiol.*, 29, 280-287, 1911-12.

absence of great physical activity. Several workers have found sugar in the urine of students both before and after examinations; and G. Bucciardi reports a considerable increase in the blood sugar of the 12 students he examined the day before, immediately before, and immediately after taking an examination. After the examination, the blood sugar fell in all but 2 students, who for good reasons remained in an agitated state of mind.¹ Similarly, hyperglycemia has been found in aviators, normal as well as neurotic soldiers, and in patients before operation.

In diabetes, it is possible to reduce the blood sugar by hypnosis. Povorinskij and Finne,² after performing carefully controlled experiments under hypnosis, conclude:

"1. The blood sugar content can be *increased by the suggested idea* of the intake of a great amount of sugar or honey; and the effect ordinarily produced by sugar intake can be very definitely *inhibited by the idea* of the absence of sugar in an actually sweet solution.

"2. Apart from the suggestion, the hypnotic state in itself tends to lower the blood sugar content.

"3. In persons with increased suggestibility, a change in blood sugar content can be produced also in the waking state.

"4. In one patient, the sugar curve rose more sharply in the case of suggested sugar intake than in the case of actual sugar intake. This increase suggests immediate cortical action as compared with the time necessary for the physiologic absorption of the actual sugar."

R. T. Woodyatt substantiates Naunyn, who "in his classic textbook on diabetes calls attention to the fact that the degree of diabetes exhibited by diabetic patients is proven to vary in response to nervous and emotional influences," and gives the following illustrative case:

A business man, aged sixty-five years, on a diet in hospital, and with small doses of insulin, was passing normal urine. Suddenly one day, with no change in régime, he passed 43 grams of sugar; and another day, 76 grams. The only cause was that he had just heard that his corporation was taking steps to retire him.³ It has become increasingly evident that in the treatment of diabetes one must, among other things, treat the individual's emotions. Some investigators have said that certain types of persons are more prone to develop diabetes than others, because of their "nervous irritability."

¹ Bucciardi, Giulio: Arch. di Fisiol., 26, 1-23, 1928.

² Povorinskij, J. A., and Finne, W. N.: Ztschr. f. d. ges. Neurol. u. Psychiat., 129, 135-146, 1930.

³ Woodyatt, Rollin T.: Jour. Am. Med. Assn., 89, 1013-1014, 1927.

During excitement, the red cells in the blood stream may be increased. In cats, blood cells may increase 27 per cent in the presence of a dog,¹ possibly through the contraction of the spleen. Similarly, blood platelets and eosinophils may rise. The white blood count and the differential blood picture vary under emotions.² Mora and others demonstrated an absolute increase in the leucocyte count and a relative increase in the polymorphonuclear forms before an operation. Conversely, under hypnosis the reverse is true.³

CARDIOVASCULAR SIGNS OF EMOTION

The heart⁴ and the gastrointestinal tract⁵ are the most sensitive recorders of a disturbed emotional state. The intimate connections between the autonomic nervous system and the heart are so close as almost to justify the statement that cardiac rhythm and rate are a measure of the activity of the state of tension in the sympathetic and the parasympathetic systems. In primitive life this inter-relationship is of great value, for the efficiency of the circulation must be improved to meet the danger "perceived." When confronted by a fearful situation, the animal's primary integrative system, the nervous system, attempts to prepare the body for action; and the most important of all preparations is the ability of the circulation to supply sufficient blood to the various organs the actions of which are speeded up. The blood must bring increased amounts of oxygen to the muscles, and carry away increased amounts of lactic acid and other waste products. The increased flow of adrenalin and the consequent rise in blood sugar must be efficiently and quickly distributed. The carbon dioxide increase must be promptly eliminated by respiration, and the associated change in the blood speeds up the delivery of oxygen to the cells.

Anger, fear, and anxiety have the same effect on the civilized human as danger has on the animal; and increased cardiac irritability is manifested whenever these emotions are present. When these emotional states become chronic, the effect on the heart may become serious because of the constant bombardment of nervous impulses. Emotional tension need not always be in the foreground of consciousness; and the general pattern of irritability, the cause of which may not be in consciousness, may be sufficient to keep the heart in unrest.

¹ Izquierdo, J. J., and Cannon, W. B.: *Am. Jour. Physiol.*, **84**, 545-562, 1928.

² Holler, M.: *Klin. Wchnschr.*, **3**, 1168-1171, 1924.

³ Mora, Jacob, *et al.*: *Jour. Am. Med. Assn.*, **86**, 945-946, 1926.

⁴ *Vide p. 295.*

⁵ *Vide p. 304.*

An exciting experience was suggested to a subject in hypnosis, with the simultaneous suggestion of complete amnesia for it. Furthermore, the subject was given the post-hypnotic suggestion that with a certain signal (seemingly accidental showing of a handkerchief) the subject would have the same sensations as during the experience. When after hypnosis, the handkerchief was shown, there was a definite increase in pulse rate (maximum, 27 beats per minute), similar to that during the suggestion of the experience in hypnosis.

In other words, an experience which is no longer in consciousness may call forth the same reactions it produced at the time of its first happening.¹ Its effects may, in the long run, produce, or at least, precipitate actual physical disease. Werley phrases this concept well:

"It makes no difference if a highly sensitized coronary artery becomes spastic because of emotion or because of an overloaded stomach or physical exertion. The symptoms are much the same except for the emotional element or its absence. Even in true angina due to coronary sclerosis, the attack may be precipitated by emotional excitement. . . . That which has been said about the heart applies to the other viscera, because the mechanism of pain in them is the same. Contraction, over-distension, pressure and pulling cause pain, and the result is very similar whether these conditions are brought about by local or organic disease or by over-action of the sympathetic nervous system under the drive of the emotions."²

Psychogenic cardiac death is regarded as an established fact by several authors.³ In primitive tribes, vigorous and apparently healthy young adults have been said to die within a few days of over-stepping a taboo. Cases have been reported of patients in good condition dying on the operating table before the anesthetic was administered. The chief cause of cardiac failure seems to be the associated fear.

That the heart rate is increased by emotion is a matter of common, every-day experience. In some instances, bradycardia may result under tension. Extra systoles are fairly frequent in emotionally disturbing situations. Von Wyss quotes Wenckebach and Winterberg to the effect that over half of 278 patients with extra systoles did not show the slightest pathologic cardiac change.⁴ It is probably the result of a disturbed relationship between the sympathetic and the parasympathetic systems. W. R. Houston discusses the whole syndrome of angina pectoris in terms of the "spasmodic aptitude." He says: "If the spasmogenic aptitude is great a

¹ Deutsch, F., and Kauf, E.: *Ztschr. f. d. ges. exp. Med.*, 34, 71-81, 1923.

² Werley, G.: *Southwestern Med.*, 15, 23-27, 1931.

³ Dunbar, H. F.: *Emotions and Bodily Changes* (New York), p. 215, 1935.

⁴ von Wyss, W. H.: *Körperlich-seelische Zusammenhänge in Gesundheit und Krankheit* (Thieme), 1931.

slight stimulus of neurogenic nature will suffice to evoke the spasm with its characteristic pain. If the spasmogenic aptitude is absent, the utmost stimulus will fail to evoke the spasm." This syndrome he finds essentially lacking in the Chinese, and it has been found lacking also in Negroes. Both races are relatively insusceptible to angina, in spite of the fact that Negroes are particularly susceptible to organic heart disease.¹

S. R. Roberts says: "Civilization as we know it in western Europe and America, the ambition, effort, and community state of mind of these areas, the increasing responsibilities that come with age, and aging circulation, apparently are the foundations for the increase in prevalence of angina. The inner adjustment to life, the real spiritual control of life whose outer evidence is a poise and tranquility of mind, is not very inviting to angina and the anginous life. . . . Racial susceptibility to the spasmogenic aptitude throws a new light not only on pyloric stenosis but upon angina, hypertension, nervous indigestion, and other spasms."²

K. Fahrenkamp points out that there are all possible transitional stages from the slightest disturbance of function in coronary circulation to the gravest pathologic-anatomic changes in the coronary vessels. "In all cases, next to physical exertion, psychic excitement is most likely to precipitate an attack."³

Similarly, study of the blood pressure⁴ reveals the extremely close relationship to emotional states. There is a change in blood distribution under emotion in limbs and body surface on the one hand and in the viscera on the other; that is, with pleasurable effects there is an increased blood flow to the limbs and body surface and a decreased blood flow to the viscera, and *vice-versa* with unpleasant effects. The blood pressure response to emotion is utilized in the lie detector apparatus, measuring the subject's guilt feeling over his actions. This apparatus fails in its purpose should the guilty person be free of emotion; or should an innocent person be very apprehensive. It is a common experience among physicians to find the blood pressure of a patient high on his first entering the office, and dropping often markedly after a short period of casual conversation. Fahrenkamp, who bases his conclusions on the study of over 800 blood pressure curves observed over a period of six years agrees with others that in all hypertensive diseases the major emphasis should be laid on the treatment of the

¹ Houston, W. R.: Med. Clin. North America, 12, 1285-1306, 1929.

² Roberts, S. R.: Am. Heart Jour., 7, 21-35, 1931.

³ Fahrenkamp, Karl: Der Herzkranke (Stuttgart), 1931.

⁴ *Idem* p. 298.

psychic element. In many patients a vicious cycle is produced; the concern over blood pressure causing further increase, which in turn may produce personality changes.¹

RESPIRATORY SYSTEM² AND OTO-RHINO-LARYNGOLOGY³

Many patients suffering from neuroses show disturbances in breathing. Deep sighs are constantly present in moments of tension. Rapid and shallow respiration may occur in apprehensive states. Heyer had his subjects perform forced breathing, and the result of the extreme carbon dioxide output was a general nervousness which went into a state of excitement.⁴

Laudenheimer tabulates as follows the interrelationships of psyche and respiration in general.⁵

REVERSIBLE ACTION

of Psyche

1. Affect causes changes of the respiratory curve, depth, and frequency. (Zoneff and Meumann.)
2. Pain or psychic excitement lowers the CO₂ tension in the blood (Straub-Beckman); the sensitivity of the respiratory center is increased, hence increased ventilation.
3. Psychic stimuli may, via vaso-vegetative centers, spontaneously or in hypnosis, lead to most serious spastic - exudative (pseudo - anaphylactic) symptoms and to typical asthma.
4. Sleep, *viz.*, tiredness, increases CO₂ tension in blood (Straub), decreases the sensitivity of the respiratory center, hence produces slowing of respiration.

and Respiration

1. Voluntary acceleration of respiratory rhythm cause Affect. (Wundt, Heyer.)
2. Hyperventilation, forced expiration (Heyer) increases CO₂ tension of alveolar air, produces Affective excitement and with appropriate breathing technique (in predisposed individuals) typical symptoms of asthma. (Tala, Strubing.)
3. Allergic stimuli may, over the reverse pathway (body fluids, colloidal disequilibrium, hormonal influence, etc.) lead to anaphylactic shock, bronchospasm, exudation, asthma, and anxiety.
4. Slowing of respiration (with relaxation of respiratory muscles) through exercise or suggestion leads to tiredness, *viz.*, sleep and underhypnosis to lasting lowered sensitivity of respiratory center (cure of asthma).

Mohr quotes in detail the case of a man who had suffered for ten years from headaches and violent coryza which were found to be psychically conditioned and thereupon cured. Similarly, he describes a case of sinusitis, the treatment of which (by a specialist) was greatly complicated by a swelling of the mucous mem-

¹ Fahrenkamp, Karl: Die psycho-physischen Wechselwirkungen bei den Hypertonie Erkrankungen (Stuttgart), 1926.

² *vide* p. 300.

³ *vide* p. 320 ff.

⁴ Heyer, G. R.: Das Körperlich-seelische Zusammenwirken in dem Lebensvorgang (München), 1925.

⁵ Laudenhimer, R.: *Therap. d. Gegnw.*, 67, 339-344, 1926.

branes. This swelling, in the rhinologist's opinion, could not be explained on the basis of the previous operation, but it was shown to be psychically conditioned, and yielded to psychotherapy.¹ Hysterical aphonia with spasms of the vocal chords is commonly observed and cured.

Bronchial asthma² is a controversial subject. Much has been said about the influence of allergy, and almost equally as much has been said about the role of psychic factors. Hippocrates said the asthmatic must guard against anger. Freud mentioned asthma often in his earliest works on anxiety. Some authors classify asthma as a respiratory neurosis, a reflex neurosis, or a central neurosis indicating the role of the non-allergic forces. Costa points out that many neurodermatoses (urticaria, circumscribed edema, and eczema) precede asthma; others occur interchangeably, as for example mucous colitis and migraine. Costa feels that asthma becomes fixated only through the neglect of this psychologic etiology followed by an irrational polypragmatic drug therapy.³ E. Moos reports 7 cases who "after complete or essential failure of medicaments, climate, breathing exercises, hydrotherapy and inhalation therapy were treated purely by psychotherapy, at first more because the writer was at a loss, and later because of the knowledge gained in the treatment of other organ neuroses." All 7 cases improved sufficiently to carry on their normal work. In 2 cases, there was sputum up to 200 cc. daily which completely disappeared. Simultaneously, eosinophilia disappeared not only from the sputum, but also from the blood (returning to normal from 16, 12.5, 10, and 7 per cent respectively).⁴ K. Hansen asserts that for the majority of cases of true bronchial asthma, an allergic diathesis must be assumed. He believes that hypnosis acts by decreasing the excitability of the vegetative nervous system, and thus the sensitivity to allergen; furthermore, it acts by interrupting the conditioned reflex which can precipitate an attack, even in complete absence of allergen; he points out, also, that in all his "relevant cases the cutaneous reaction remained positive even after the elimination of the asthmatic attacks, *i. e.*, the allergic and specific constitution remained."⁵ Brauns reports on 12 hay-fever patients treated exclusively by hypnosis, 10 of whom suffered

¹ Mohr, Fritz: *Psychophysische Behandlungsmethoden* (Leipzig), 1925.

² *Vide* p. 302.

³ Costa, N.: *Deutsch. med. Wchnschr.*, 48, 1458-1459, 1926.

⁴ Moos, Erwin: *Münch. med. Wchnschr.*, 67, 805-808, 1926.

⁵ Hansen, Karl: *Deutsch. med. Wchnschr.*, 55, 1462-1464, 1927.

no relapse (3 having been followed for three years, 4 for two years, and 3 for one year).¹

GASTROINTESTINAL SYSTEM²

Nervous dyspepsia was first described as a disease entity by Leube, in 1879. Ewald (1884) and others did not accept the concept of nervous dyspepsia as a clinical entity. They stressed the concept of nervous dyspepsia as a symptom complex constituting a part of neurasthenia or hysteria, often even the *only* expression of such a neurosis. (*Italics mine.*) This latter is the modern view. It is a common experience to find that persons who develop financial difficulties suffer from gastric disturbances, often until the financial state improves. On the other hand, it has been suggested that these gastric disturbances produce psychic alterations; but, as Dreyfus states, "one wonders how an innocent gastric catarrh or dilation could produce psychic turmoils (such as anxiety, depression, suicide) whereas they are never found in much more serious gastric conditions such as ulcer and carcinoma."³ Being content to consider psychic changes as simply auto-intoxication, some investigators stressed doubly the importance of treating the stomach and not the psyche. Further, they maintained, the habit was established of seeing in psychic changes nothing but a "natural" consequence of the complaints; the psychic disturbance was only natural, even if it looked exactly like a melancholia; suicide was understandable, because the patient did not want to suffer any longer from his stomach. However, "it is not the gastric trouble that makes the patient a hypochondriac, but the hypochondriasis causes the gastric trouble."

Cannon expresses the same attitude: "An emotional disturbance affecting the alimentary canal is capable of starting a vicious circle; the stagnant food, unprotected by abundant juice, naturally undergoes bacterial fermentation, with the formation of gases and irritant decomposition products. These in turn may produce mild inflammation or be absorbed as substances disturbing to metabolism, and thus affect the mental state. . . ." "Just as feelings of comfort and peace of mind are fundamental to normal digestion, so discomfort and mental discord may be fundamental to disturbed digestion."⁴ Mental discord can be of many varieties; for the stomach, like the heart, may react to almost every emotion

¹ Brauns, W.: *Med. Welt*, 7, 559-562, 1933.

² *Vide p. 304 ff.*

³ Dunbar: *Op. cit.*, p. 270.

⁴ Cannon, W. B.: *Am. Jour. Med. Sci.*, 137, 480-487, 1909.

and sensation that man is capable of experiencing. Depressing emotions appear to inhibit the gastric and even duodenal secretion. Exaltation seems to favor gastric secretion.

Salivary secretion is increased and made more acid by excitement. Bogen experimented on a child aged three and one-half years with esophageal stenosis and gastric fistula. Milk and food remained caught in the stenotic esophagus, but hydrochloric acid appeared in the stomach whenever food was given. Bogen sounded a trumpet whenever food was given; and soon thereafter, trumpet sounding alone produced gastric juice with free hydrochloric acid. Anger inhibited the secretion.¹ Under hypnosis, Heyer was able to produce secretion of gastric juice, which varied in amount according to the imaginary food the subject was eating. In another group of hypnotic experiments, it was found that relish in connection with food increased the acidity, disgust decreased acidity.²

Similar is the operation of other secretions of the gastrointestinal tract. It was observed, accidentally at first, that excitement in dogs decreased the flow of bile. Pancreatic secretion in a dog which had been stimulated by a plentiful meal was stopped when the dog was shown a cat, and on another occasion when the dog was suddenly shown a bitch in heat and prevented from going to her. In human subjects under deep hypnosis, it was found that even the type of secretion was dependent upon the type of food suggested, varying with the albumin and fat content.³

Other physiologic effects of psychic stimuli are found in globus hystericus, a spasm of the esophageal musculature; cardiospasm, which must be carefully differentiated from that produced by organic etiology, and inhibition of gastric motility is observable in emotional subjects under fluoroscopy.

Peptic ulcer⁴ has been thrown more and more into the limelight in studies of the psychosoma. Several points stand out: (1) peptic ulcer is not a purely local disease of the stomach. Cushing first observed 3 cases of early fatality due to peptic ulcers following operation on brain tumors. The constitutional factor in the predisposition of ulcers indicates the general correlations of the disease.⁵ (2) In the etiology of gastric ulcer, the literature stresses

¹ Bogen, H.: *Arch. f. d. ges. Physiol.*, 117, 150-160, 1907.

² Heyer: *Op. cit.*

³ Oechsler: *Internat. Beitr. 2. Pathol. A Therap. d. Ernährungsstör.*, 5, 26-30, 1913.

⁴ *Vide p. 295.*

⁵ Tscherning, R.: *Arch. f. Verdauungskr.*, 31, 351-360, 1923.

the importance of disturbance in gastric secretion and motility. (3) There is increasing recognition of the role of psychic factors in the etiology of peptic ulcer, and the recurrent attacks thereof. In general, it is well to remember that *ulcer is the last manifestation of several processes* which have gone on before, including the predisposition, and the psychologic and physical disturbances which have brought about a disturbance of gastric motility and secretion. Pylorospasm, and spasm of the intestines are subject to similar analysis.

Spasm of the colon, mucous colitis, and spastic constipation are all subject to emotional disturbances.¹ Intestinal activity is increased at the sight of food and decreased in pain and anxiety. Depressive states are characteristically associated with constipation, which may at times alternate with diarrhea. Attempts to treat constipation by itself without reference to the accompanying emotional state are bound to eventuate in failure. Heyer through hypnosis was able to give a patient a large dose of opium, which is ordinarily constipating, and suggested to the patient that castor oil was taken; and the results were those ordinarily occurring with castor oil.² Mucous colitis is practically always associated with emotional states, and has been cured by psychotherapy alone.

Vomiting, particularly nausea and vomiting, has many roots in the problems of the psyche. Frequently the vomiting of pregnancy is on this basis and often occurs among women suffering from the stress and strain of marital discord.

GENITO-URINARY SYSTEM AND GYNECOLOGY³

The bladder is under involuntary and voluntary control, and thus has two avenues for psychologic disturbance. When tension arises, the bladder tends to empty itself frequently; while in hysteria, emptying of the bladder may be delayed an abnormally long time. Schwarz cites cases of retention of urine in men concerned over masturbation and impotency.⁴ Eneuresis on the other hand is practically always the result of a co-existing state of tension and emotional instability. Spermatorrhea similarly is common in persons with psychologic difficulties, particularly in those in whom there is much sex tension. Impotence⁵ is far more often the result of psychic than of physical forces.

¹ *Vide* p. 310.

² Heyer: *Op. cit.*

³ *Vide* p. 313.

⁴ Schwarz, O.: *Psychogenese und Psychotherapie Körperlicher Symptome* (Wein), pp. 273-294, 1925.

⁵ *Cf.* Ch. V, p. 110.

Nephrolithiasis has been listed among those illnesses which are psychically determined, secondary to disturbance in the chemical composition of the urine.¹

Menstrual disturbances are exceedingly common in their relation to psychologic forces.² Patients with psychoses show a remarkably high percentage of anomalies of menstruation. Amenorrhea often occurs in women who are concerned over sex; for example, fear of pregnancy among unmarried girls. Pseudopregnancy, or *grossesse nerveuse*, or a delusion of pregnancy accompanied by amenorrhea, vomiting, and enlargement of the breasts is not uncommonly seen. In many of these cases, there is even an abdominal enlargement due to distention of the abdomen by gas in the intestine.³ Hypnosis can often cure amenorrhea or profuse bleeding. G. R. Heyer says that he is frequently asked to postpone menstruation in artists when it would occur at the time of an important performance.⁴ Dysmenorrhea can in many instances be improved by psychotherapy. Low back pains, and pelvic pain in many instances exist on a background of discontent and chronic anxiety. Labor pains are an excellent example of the influence of personality factors: some women experiencing comparatively little pain, and others apparently suffering beyond all relation to actual physical difficulty. Hypnosis is used successfully in effecting a complete amnesia and absence of pain in labor.

SPECIAL SENSE ORGANS

Headache⁵ is one of the most common conditions for which patients go to the ophthalmologist, and glasses are frequently requested not to improve vision, but to relieve headaches. Headaches due to emotional tension may be of any variety, but there are three common types: (1) pressure on top of the head; (2) aching over the occiput; and (3) a tight, band-like pressure as if the head were being "squeezed." Obviously these headaches may be produced by many physical causes. However, even in emotional states the headache is not "imaginary" but is probably the result of some alteration in the vasomotor function.

There are many ophthalmologic complications⁶ in hysteria. Blepharospasm, palsy and spasm of the various extrinsic muscles

¹ Groddeck, G.: *Allg. ärztl. Ztschr. f. Psychotherap.*, 2, 665-680, 1929.

² *Vide* p. 328 *ff.*

³ Dunbar: *Op. cit.* pp. 346-348.

⁴ Heyer, G. R.: *Hypnose und Hypnotherapie* (Leipzig), pp. 73-135, 1927.

⁵ *Vide* p. 341.

⁶ *Vide* p. 320.

of the eye, monocular diplopia, tubular vision, and defects in the visual field are common. Rutherford, investigating the records of students at the University of Iowa who had been referred to the eye-clinic over a two-month period, chose for study all those between the ages of seventeen and twenty-six who had no organic ocular lesion. Out of 80 such cases, 63 complained of one or more symptoms having no objective relation to any visual defects. He concluded that astheopia or eye-strain needs to be considered as a probable neurosis. He quotes Emerson as advising that "patients should be examined as individuals and not as optical mechanisms to be fitted at the test chart," and "that lenses should be fitted to a patient's nervous system as well as to his eyes."¹ Non-visual disturbances include anesthesia of the cornea and are useful as diagnostic criteria of hysteria. Spiral visual fields may be an indication of psychoneurotic traits.

Ear disturbances² are frequently seen in the nature of hysterical deafness, ear pains, and noises in the head. These symptoms may be "*caused by*" intense emotional difficulties, and play their role just as do the other psychoneurotic symptoms. On the other hand, psychic disturbances *may result from* impaired hearing; and paranoid symptoms are not an uncommon resultant. In these instances, the psychogenesis seems to be as follows: The patients hear what is being said, and become irritated both at the person for not speaking loud enough and at their own inferiority in hearing. Many of these persons will insist that they are not hard of hearing and that the trouble lies in those who are speaking. Delusions then occur that whatever is being said that cannot be heard is said against them, and on this basis a system of delusions develops.³ Persons who have worked with the deaf and blind often comment on the extreme suspiciousness of the former as contrasted with the amiable behavior of the latter. Smell and taste are also subject to disturbances, particularly in the psychoses. Patients frequently complain of "tasting" dope in the food and "smelling" gas pumped into the room to kill them.

The skin⁴ is one organ particularly sensitive to emotional disturbances. Many diseases of the skin are more likely to be expressive of general physiologic and psychologic disturbance than of local pathology. Among the more obvious psychic correlates of skin changes are the pallor from fright, blushing, erection of hair, cutis anserina (so-called goose flesh), and changes in sweat secre-

¹ Rutherford, C. W.: Jour. Am. Med. Assn., 99, 284-288, 1932.

² Vide p. 322.

³ Vide p. 324.

⁴ Vide p. 316.

tion. Commonly appreciated as a psychic factor is the increased amount of pruritis in emotional persons suffering from a mild dermatitis. In addition to these symptoms pertaining to the skin, there is a host of less well-recognized lesions which are the result of emotional tension. Urticaria, edema, and eczema are frequently found to be on a psychologic basis. Even skin blisters were produced by hypnosis under carefully controlled conditions by Doswald, Kreibach,¹ Heller and Schultz,² Schindler, and others. During hypnosis it is possible to inhibit bleeding due to a pin prick; and on the other hand, several writers have recorded "spontaneous ecchymosis in psychoneurotic disorders."³

The skin is overly sensitive to heat, cold, or stroking, in some patients. In some, stroking of the skin gives rise to erotic pleasure. In some, itching without any apparent cause becomes extreme. Pruritis about the genitalia and anus may in many cases be secondary to an erotic urge rather than to physical changes.

Congestion or pallor accompanying emotional excitement may occur in blotches about the neck and face. The tendency of the skin to pathologic blushing and pallor is often combined with an inclination of the capillaries to exudative processes on mechanical stimulation. Dermographism is a manifestation of this marked liability of the capillaries, and the difference between dermographism and urticaria is only one of degree. Many cases are reported of urticarial eruptions which occur in the course of emotional disturbance and which are cured by psychotherapy.

Eczema is one of the commonest diseases of the skin, and is often the result of tension in the patient. Bunnemann reports a case of eczema treated locally two and a half years unsuccessfully and eliminated in three hypnotic sessions.⁴ Bonjour recalls the well-known case of the Russian professor who suffered from chronic infectious dermatitis and returned home uncured after having been treated successively by Kaposi, Lassar, and Fournier. His family tried to induce him to consult a woman who cured eczema by prayer but, being an atheist he refused. Finally, sick of suffering, he went to see her. She took him to the church and asked him to wait at the door. After the first prayer, the pruritis ceased; and after the next day's prayer, the eczema was cured. This cure

¹ Doswald, D. C., and Kreibich, K.: *Monatshefte f. prakt. Dermat.*, **43**, 634-640, 1906.

² Heller, Fr., and Schultz, J. H.: *Münch. med. Wchnschr.*, **56**, 212, 1909.

³ Jacobi, E.: *Arch. f. Psychiat.*, **88**, 631-645, 1929.

⁴ Bunnemann, O.: *Ztschr. f. d. ges. Neurol. u. Psychiat.*, **78**, 115-152, 1922.

proves, says Bonjour, that the infection was secondary and the eczema was of nervous origin.¹ Many writers report cures of eczema by psychotherapy which could not be cured by any other means. Psoriasis is reported on a similar basis. Warts also have been known to be cured by suggestion, whether it is by means of prayer, hypnosis, or burying a black cat in the cemetery at the stroke of 12, as Huckleberry Finn suggests. Important is the fact that cure of warts by suggestion leaves the skin without a scar, a condition not true when cauterization or surgery is used. Bonjour presents photographs of the manner of healing; most frequently it is a process of atrophy, in other cases, pediculization.²

The clinical and experimental studies cited above, are indicative of the oneness of the organism. An idea associated with fear, for example, involves a reaction pattern of the whole body, and not of the "mind" alone. Emotion is indeed more of a physiologic phenomenon than a psychologic one. Specific changes may occur anywhere in the body as a result; and although the first etiology may be some danger which we perceive in the distance (either distant in place or time), the symptom may have its origin in some altered function of the body. Therapy, to be successful, must bear this concept in mind.

¹ Bonjour, J.: *Schweiz. med. Wchnschr.*, 61, 1255-1256, 1931.

² *Ibid.*, 54, 748-751, 1924.

CHAPTER V

SEX DRIVES

THE relative ease with which society is able to produce food-stuffs and necessities renders the self-preservation drive less urgent, and permits increased attention to be given to the physiology, psychology and psychopathology of another fundamental drive—sex. The need for such attention is acute, for about no other aspect of life is there more wholesale ignorance and misinformation. It is of vital importance to health and happiness that a frank and objective understanding of sex—its nature, significance, manifestations, and potentialities—replace the all too common practice of treating it secretly, smirkingly, with an air of mystery, repression, revulsion, and taboo.¹

Since the sexual drive is a part of the total organismic reaction, any phenomenon or stress which disturbs the organism may disturb the sexual drive. Consequently, in those personality disorders which we label “Neurosis” and “Psychosis,” one frequently finds as *part of the total disturbance* a disturbance in the sexual function. When perceived from this point of view, sex can be understood simply and without excessive emphasis. It is indeed a mistake to place an over-emphasis upon sex and represent it as the most important factor, simply because there is a more obvious manifestation of its disturbance. From practical experience, one finds that many of the sexual disturbances return to normal if the stress upon the organism in other fields is removed.

However, sexual maladjustment in itself may be a primary stress which can lead to wide disturbances in the personality. The force of the sex drive carries it to some vicarious form of expression if the sex desire as such cannot find fulfillment. When this force is restrained or completely blocked by social prohibitions or individual inhibitions, the sexual force will express itself either constructively or destructively; in the former case, much of the drive for the work which is socially useful may be said to be, in part at any rate, a redirected sexual drive; in the latter instance, there may be sadism, emotional lability and symptoms of tension and symbolism. In any given case where one finds sexual maladjustments, one must evaluate how much of the sexual disturbance is

¹ *Vide* p. 55.

truly etiologic in character and how much is purely symptomatic of other stresses.

NORMAL SEX ATTITUDE AND PRACTICE

Children, as a rule, are not more interested in sex than in many other phenomena. In the multitude of questions that are asked in childhood, a number of them will bear upon the method by which children are produced. These questions, however, are merely part of the curiosity drive. If a child, for example, wishes to know where babies come from and is told that they are born inside the mother, such an answer is generally satisfying; and if the child asks how they come to be borne inside the mother, the answer that the father plants the seed is again often sufficient. The child often develops an over-interest because the environmental taboos make it obvious to the child that here is an interesting topic.

The amount of information given should be governed by the child's level of maturity. It is only as puberty approaches that more detailed and specific interest in the adult sex life is shown and understood, and it is at this time that the physician or some objective friend should explain to the child the physiology of sex: that males have the organ called the "penis" and that females have the organ called the "vagina" and that after marriage the penis is introduced into the vagina and thereby is planted into the mother's womb a seed which eventually becomes a child. Such an explanation, which then goes on to dwell upon physiology, makes the whole affair a matter-of-fact one.

If there is no atmosphere of tension or emotion about the informant, the child will accept such a straightforward explanation with the same dispassionate interest and satisfaction that he feels when he "learns the answer" to any other of the countless mysteries with which he is constantly confronted. A wholesome understanding of sex will have been implanted; and the child, feeling that he "knows all there is to know" on the subject, will quickly be engrossed in normal physical and social activities.

Such normal and ideal growth in sexual knowledge will be possible only if there has been created in the environment no emotional tension on the subject. If, however, as is all too common, there have been scoldings, secrecy, and shame;¹ if a child has been put off with such answers as: "You are not old enough to understand"; "Nice persons do not talk about such things"; "Don't let

¹ *Vide* p. 105 (Case J. B.).

me ever hear you talking about such things again," then he will surely acquire his "misinformation" in such a way as to think of the whole matter of sex as something "dirty" about which to snicker or to be ashamed. In such circumstances, sexual explanations, of necessity, carry with them an additional emotional tone.

The physician should attempt to make his explanations extremely matter-of-fact, while at the same time remaining sympathetic to the child's emotional state. The atmosphere of tension present in the child should be removed by frank and vocal recognition that "you seem to think of this sex problem as an emotional one, but you can handle it just as any other one." If the adolescent can be persuaded to take such a common sense attitude, much of his future discomforts will be eliminated.

Both the male and female may find accidentally that pleasure is derived from manipulation of the genitalia. In the boy there may be spontaneous erections which are followed by manipulation and ejaculation. This phenomenon is a normal one and generally occurs in most males for one or two years after puberty. It may occur one, two, or three times a week, and gradually disappears in one to three years as the boy becomes less interested in himself and more interested in the physical and social activities about him. Nocturnal emissions are normal and may occur for many years. They are increased by lying upon one's stomach or by the excessive use of condiments or large fluid intake just before retiring. Similarly, in the female, there may be massage of the clitoris, but only rarely is there any introduction of objects into the vagina. The parents, during this period, should encourage and facilitate all manner of social and recreational interests. Such masturbation is rarely accompanied by phantasy: it is simply an experience of physical pleasure.

As a child develops into and through adolescence, sexual desires may by varying degrees be aroused by the ordinary social contacts between girls and boys. The person's make-up, and his susceptibility to the more or less rigid moral standards set in the home and in society, will or will not prevent sex relations from occurring before marriage. Adolescents should be taught that the sex desire is perfectly normal; that no harm can come from continence; and that it is advisable to become actively engaged in physical and recreational activities, and to spend as little of the conscious time thinking about sex as possible. The energy directed along the channel of sex, it should be explained, can be redirected constructively into other channels—until marriage occurs.

When coitus does occur, very few persons understand the mechanism.¹ Ignorance of the procedure most calculated to bring about maximum satisfaction results in a great deal of sex dissatisfaction, on the basis of which the vicious cycle of matrimonial disharmony develops. It would be highly advisable for the physician to instruct all prospective wives and husbands in the phenomenology of proper sex relations. Many women are married with only a vague and often erroneous understanding of what is to occur. The male, being much more easily aroused than the female, and not appreciating this difference, often uses little consideration.² In many women an intact hymen or a small introitus may make coitus difficult. The male should be instructed to indulge in sex play, with much kissing and petting, before intercourse is attempted. Especially during the first intercourse, the male should introduce first one, then several fingers into the vagina so as to dilate it properly. Copulation should occur when both partners are aroused, and during the act of copulation the male and female should enter actively into it. A rhythm will eventually be established, if there are no disturbing emotional factors, so that the orgasm will occur simultaneously in both parties. The orgasm in the male generally occurs with the ejaculation, but it does not necessarily do so. In the female, the orgasm may be accompanied by some vaginal secretion; and in some cases, there may be actual uterine contractions, but as a rule *the orgasm is simply an intense nervous release of tension*.³ The orgasm as such is an exceedingly important phenomenon. Essentially coitus is a building-up of tension followed by a sudden release or discharge. This release, or orgasm, is succeeded by a sense of marked relaxation. Should, however, the orgasm not occur, tension persists—often for long periods of time. Many women in whom tension is aroused but not released may cry and become very tense, irritable, and sleepless after coitus.

Sex relations may occur very frequently during the first few weeks of marriage; but thereafter usually take place two or three times a week. These relationships occur at this rate throughout the third and fourth decades, gradually becoming fewer until they average about once a month after the age of sixty. There are, however, tremendous individual variations; and there may be very frequent or very infrequent sex relationships all through life.

Physical health is of importance. The male may be very aggressive sexually; or on the other hand, relatively passive. The same

¹ *Vide* p. 166.

² *Vide* p. 166.

³ *Vide* pp. 112 (Case T. V.); 245.

factors hold true for the female. When one partner feels an intense desire and the other does not, there may be cause for disharmony.¹ Again, not infrequently, there may be an actual physical orgasm, but extreme dissatisfaction remains if the emotional and psychologic relationship is not what is expected. Often men have ejaculations and orgasms, but are left with a feeling of dissatisfaction because of the irritability or lack of enthusiasm on the part of the wife. There are many variations of this phenomenon.

Sex desires tend to be more frequent at certain times in a woman's life, generally just before and just after menstruation. Sex relations are usually most enjoyed when there is a spirit of excitement preceding the intercourse. In the ordinary routine of the average married life, this excitement and excitability do not come about so often as they should, and *sex relationships become a routine matter*. It is this routineness which on a number of occasions may give rise to dissatisfaction in one partner or both. On the other hand, complete sex satisfaction may do much to increase the love and affection between compatible persons. It adds a fulness and an emotional tone to marriage that cannot be obtained in any other way.

The purpose of these discussions is not to describe all the sexual aberrations that may occur, but merely to mention the most common difficulties which are met with by the average physician. Moreover, in sex as well as in all other reaction patterns in life, there may be temporary maladjustments among some persons and more or less permanent ones among others. Many sexual factors adjust themselves with practice and with time. The fact that sex has too long been shrouded in ignorance, and that it has been dealt with as an indelicate topic, has resulted in the development of a great number of symptoms which could very easily have been prevented.

There are all degrees of sexual maladjustments. Often what is normal for one person is abnormal for another. Temperaments vary as well as the social conditions and the standards set by the individual families.

The physician should try to deal with sexual problems from the effect they have upon the physical or mental health of the patient. It is inadvisable to go against the rule of the society in which he lives and to insist or advise the patient to break existing moral codes; for when difficulties occur, the patient often blames the physician. Rather should the actual facts be presented

¹ *Vide* p. 167 (Case H. I.).

unemotionally and fairly, and the physician should insist that the patient, and the patient alone, decide his course of conduct. The physician is neither a moralist nor a clergyman:¹ he can only advise on matters of health.

SEX AS A TENSION-RELEASING MECHANISM

The sexual function not only serves the end of race propagation, but has other values. Proper sex relations, besides being pleasurable in themselves, are definitely (1) *tension releasing* in their effect, and (2) they are very often used as a *pleasure substitute*; i. e., when other real satisfactions in life are denied the person—he or she—may turn to gratification in sex. Over-interest in sex may thus be indicative of a lack of other pleasures and of boredom. In addition, incomplete sex satisfaction, generally without an orgasm, is definitely tension producing.

As the person engages in sex play, whether it be only in phantasy or in actuality, tension is built up which, if unreleased, tends to have a vicarious expression.

EARLY SEX MALADJUSTMENTS

A great number of the difficulties due to sexual inefficiency in adult life can be ascribed to the pattern of sex laid down in childhood. It had been the tendency, and still is among a large percentage of the population, to take the attitude that sex is sinful; that one must never speak of it; that it is a hidden, lewd, and disgusting part of one's life which one should never even think of. Girls are told not to play with certain "horrible boys," and mothers often manifest an obvious prudishness and concern. In general, the whole phenomenon of sex is given a mysterious and unpleasant tinge. The result of this atmosphere is to make the child at once avidly interested in the subject and to build up inhibitions which have a far-reaching effect.

Miss J. B., aged forty-two years, was single, and "detested" men. Once when a man asked her to marry him, she became furiously angry that any one would think "such a thing of her." She had a few women friends but did not particularly enjoy their company. She much preferred to be alone.

Her early environment not only was unfortunate in its atmosphere of tension but was particularly poor in sex hygiene. Her mother was extremely sensitive and bitter on the subject of sex. The children were continuously filled with tales of the evil nature of men; and there were many insinuations

¹ Vide p. 190.

of the evil intentions of women acquaintances as well. So strong were this mother's feelings that she never permitted the children to undress before each other, or even before her. The patient "came by her prudishness rightfully."

On the other hand, over-exposure to sex at an early age may also lead to abnormal reactions. In other words, over-emphasis in either direction is unhealthful. Sex hygiene should be as objectively considered and dealt with as physical hygiene, and any sort of over-evaluation should be avoided.

One might suggest the rule: The more the attempt is made to prevent the child from knowing about sex, and the more sex is surrounded with a shroud of evil, the more surely will the child be both interested in it and inhibited about it. The physician sees many women who think that kissing will cause them to become pregnant; who feel that intercourse without an orgasm is an effective way of preventing conception; who permit sex relations only for the purpose of having children; who deny themselves the pleasure of an orgasm because it is sinful, etc. Many women are prudish to the extent of being unwilling to undress for a physical examination, or of avoiding seeking a physician when there is any disturbance in the generative tracts. As a result, there develops an attitude of not facing the facts of sex; and this attitude so easily applied in the one direction, quickly extends to a general unwillingness to face reality in non-sexual directions. This reaction pattern of avoidance¹ of that which is emotional or irritating is common; and too often its genesis lies in the lack of courage to face the facts of sex frankly.

Mrs. C. O. was brought up in a very strict and domineering home. Her parents were exceedingly prudish, and she knew nothing of sex. She was not even informed about menstruation; and when menses first appeared at the time of puberty, she experienced a tremendous emotional shock. When she married, she was horrified at her husband's desiring sex relationships. She yielded only after her husband used physical force and she developed an intense emotional reaction characterized chiefly by marked trembling of her entire body, insomnia, anorexia, and crying spells. She impressed her resultant aversion and prudishness so much upon her daughter that at the age of sixteen the daughter, in reaction against this teaching, became illegitimately pregnant.

Such phenomena are exceedingly common and are the answer to the query so often asked by friends, "Why should the daughter turn out to be 'so bad' when her mother is 'so good'?"

¹ *Vide p. 208 ff.*

Mrs. S. L. had acute anxiety symptoms. She had marked choking in the throat, her heart beat very rapidly, she was frightened, and feared to walk out of the house alone.

Mrs. S. L. lived in the slum districts. Her father was an alcoholic and deserted the patient's mother soon after the child's birth. The mother also drank and did not work frequently. From the earliest age, the patient was accustomed to see strange men in the house, swearing and cursing the mother, and not infrequently was she aware of the illicit relations in the next room of their extremely small apartment. Her reactions to sex were intense, and she married only because of the persistence of her "boy-friend." Sex always reminded her of the horrible days and nights spent witnessing her mother's debauchery.

This case is an extreme one, but a similar situation may arise wherever the moral code is very lax. Indicative of what "goes on behind the scenes," and of the type of ideas children get is such a question as the following over-heard query: The speaker was thirteen-year-old Don, "John, whose wife are you going to kiss when you get big?"

Another factor in early sex maladjustment is sex trauma. Children may be exposed while young to some perverse person and have some unpleasant experience which may result in an abiding fear of, or distaste for, sex relations.

Thus, Mrs. W. O. came in with the complaint of headaches, occasional dyspareunia, and frigidity during sex relations. When she was eight years old, a middle-aged man exposed himself before the patient who became violently frightened, especially when he offered her money and tried to force her to play with him. She was uninformed about menstruation; and when it occurred, she developed severe guilt feelings, thinking that the blood was a punishment for this sexual experience. She never had recovered from the shock, in spite of her marriage and children.

Mr. P. O. was not conscious or aware of the significance of sex, and he was regarded by, and regarded his parents with affection. When he was seven years of age, he unexpectedly came into his parent's bedroom one morning while they were having sexual relations, and he assumed from the positions that the father was hurting his mother. He was badly frightened and upset. From that moment he detested his father, and even after he intellectually "understood," he could not get over his dislike. He felt even more guilty because he was like his father, and he wished that he were not a man.

MASTURBATION

One of the most common of sexual difficulties grows out of the phenomenon of masturbation. As has been previously pointed out, masturbation is in itself a normal phenomenon, occurring shortly before and after puberty, and tending to disappear as the person

becomes more engrossed in social and physical activities, and finally, as satisfaction is obtained through coitus in marriage.

The attitude of society, however, in many instances has been to condemn masturbation. It is to the interest of society and of mankind to discourage such practices which inherently have the tendency to prevent propagation. The way in which masturbation is discouraged is, however, often very unsatisfactory. The person understanding neither his own desires nor the prohibitions placed on them, tends to develop guilt feelings. He is often told that masturbation is "awful"; that a person who practices it may develop disease; may become exhausted and get tuberculosis; will develop insanity and lose his mind; will injure himself physically; will lose his sexual potency, etc. The attitude of the parent often seems to be based on the desire to terrify the child. This frightening experience is worse than ineffective, for generally the physiologic drives are strong enough to force masturbation in spite of the fears which have been set up; and were it not for the frightening experiences, the tendency and desire for masturbation would usually disappear more quickly. The *feeling of guilt*, however, focuses attention upon sex; and because of the interest centered therein, makes the masturbation tendency continue long after its normal period of cessation, while at the same time producing many emotional and physical symptoms.

Thus, for example: Mr. D. D., aged thirty-one years, complained of having had a feeling of pressure on top of his head since the age of sixteen. This pressure was associated with the sensation of a band squeezing around his head, and with insomnia. This man had begun to practice masturbation at the age of sixteen and was discovered early in this practice by his father, who had told the boy that he would certainly go insane. Immediately upon hearing this prediction, the patient developed a pressure in his head and thought so much about his masturbation that he could not sleep. His entire interest became centered upon sex, and he could not develop the normal interest in physical, social, and recreational activities. He began to feel that people knew about his practice, and condemned him, and he grew very sensitive and was on the defensive whenever any of his non-sexual wishes failed, feeling that failure was entirely the result of his autoerotism.

It is important, therefore, in preventive therapy to see to it that the child has a normal understanding of masturbation, and that he be provided with sufficient energy outlets so as to become interested in things outside himself. Masturbation, he must be told, has no effect whatsoever upon the mind or body unless the patient feels guilty and is concerned about it. But he further must be told that masturbation in itself is a symptom of puberty, is

immature, and dies out as soon as he becomes more mature and interested in outside events.

Release of Tension.—Release of tension may occur through masturbation. As has been pointed out, during sex relationships, tension is first built up and then released at the orgasm. Similarly, in certain anxiety states where tension is built up by other causes, such as concern over finances or social situations, some release of this tension may be obtained by orgasm.

Patients suffering from anxiety depressions sometimes utilize masturbation as a means of releasing some of their tension and anxiety; but this release is brief, and usually masturbation is not a predominant symptom.

Masturbation may be used as a *compensatory mechanism*¹ for obtaining pleasure whenever the person feels depressed, or unloved, or cruelly treated. This use is more generally made by children than by adults.

Miss F. M.,² aged thirty-one years, had been practicing masturbation since the age of seven. She was brought up in an extremely unstable household. There was a domineering mother and a weak, disgruntled father who sustained himself on a small pension fund. The children were made the butt of the dissatisfactions present in the parents. The girl was constantly scolded; ordinary toys were denied her because of lack of funds; her clothing was unkempt; she had a feeling of being different, and was despised by the other children in the school; she felt lonely, had no one to turn to. She discovered masturbation accidentally, and the pleasurable relief obtained thereby gave her some compensation for the unpleasant life she led. At the same time she felt extremely guilty over the act and tried to stop the practice. This conflict between her guilt feelings and the desire to obtain some pleasure led to her using the words "horrible fascination" to describe her attitude toward masturbation. She developed fatigue and insomnia which were chronic.

This tendency to seek pleasure substitutes coincides with the phantasy development which is so common in children, and both are employed as an escape from reality.

There are some persons who may be termed "chronic masturbators." Many of these persons have a sallow, dreamy-eyed appearance and are very introvert in their tendencies. On analysis, it appears that their entire life is spent in a mixture of fantasy and reality. Their wishful thinking is such that they border very closely upon the schizophrenic reaction types.

One such male, aged thirty-one years, practiced masturbation three or four times a day for a period of fifteen years. He obtained no sex satisfac-

¹ Vide p. 84 (Case Q. M.).

² Vide pp. 54; 74.

tion from sex contact with women. He had never concentrated upon any work and fell into that class often diagnosed as Simple Schizophrenia.

In the psychoses, masturbation is often a common concomitant, particularly in Schizophrenic reaction types; and it follows the same principles as in the chronic masturbator: namely, a narcissistic "love of self" and fulfillment of desires in phantasy.

IMPOTENCE

Impotence in the male may result from such physical factors as illness, fatigue, syphilis of the spinal cord, tumors of the spinal cord, and local lesions. Physical impotence is rare in young healthy persons; and whenever it does occur in men under fifty, it is in the vast majority of cases the result of psychologic factors.

The ability to have an erection is the result of a desire for sex satisfactions. Should conflicting emotions stronger than the sex desire come to the fore, impotence may result. Thus a person who may be disgusted with his sexual partner, or who may feel antagonistic, may fail to have an erection; those who are in a state of fear may temporarily be impotent. Concern over masturbation is a very common cause of impotence. Many men are afraid to marry because they feel that masturbation has "robbed them of their manhood."

Other factors which will influence the male are: (1) a frigid wife with whom sex relations are unsatisfactory; (2) an overburdened conscience; (3) placing the wife on a pedestal so that she cannot be regarded as a human being but only as an ideal; (4) over-aggressiveness of the female in a relatively non-passionate male; (5) concern about business¹ or social situations, etc.

K. Y., aged thirty-four years, complained of pains about the heart and of impotence. He had been married for fourteen years and had two children. For the past three months he had been impotent, although up until that time, sexual relations occurred normally two or three times a week. Six months before, the man had been discharged from his employment and had been unable to find other work. The financial situation became exceedingly acute and the patient, who was proud, put off asking for charity. However, because of the need for his wife and children to eat, he had to go on relief, and it was on the background of these worries that impotence resulted. A different attitude toward his financial state and the partial relief thereof caused the impotence to disappear.

C. T., aged thirty-four years, complained of having had for four years a pain in one testis. Four years before, he had been married and living with

¹ *Vide* p. 170 (Case S. O.).

his in-laws. His wife whom he respected discovered him with another woman; and his conscience troubled him to the point that he found, immediately thereafter, that he was completely impotent.

FRIGIDITY¹

Frigidity, or lack of sexual satisfaction in women, is an exceedingly common phenomenon. It is far more common among women than is impotence among men. Frigidity, or sexual anesthesia, may be partial or complete. When it is partial, some satisfaction is derived during coitus, but no orgasm results. When it is complete, there is a marked tendency toward frustration symptoms. The causes of frigidity are several:

1. Early training² is the most common factor. Too often girls are taught by precept and example to be prudish. Sex is not placed upon a normal plane as something which is a pleasant part of marriage, and which is perfectly normal and natural, but is rather taught as being something which is "not nice" or even "wrong." Inhibitions which are thus built up carry through from early childhood to marriage.

2. The first introduction into sex relationship if improperly done often gives rise to a conditioned response of dissatisfaction and pain. The virgin female often is very tense during the first approach. This tension, in combination with an intact hymen and undilated introitus, may make for a very painful sex relationship, which may be further complicated if the husband in his approach is exceedingly direct and makes no attempt to arouse his wife and obtain relaxation. Many women on experiencing this very unsatisfactory first sex relationship become disillusioned, particularly if they have built up a set of romantic ideas about sex satisfactions.³ Instruction to both the male and female before marriage is often a very important factor in preventing frigidity and thus preventing matrimonial disharmony.

3. Roughness and precipitancy of the husband frequently make for rigidity. The female requires a longer period of stimulation in order to become properly aroused. The male, becoming aroused much more quickly, may not consider these factors; and the result is an unprepared wife who comes to fear sex relations as well as to be frigid.

A number of women stay up late into the night and avoid going to bed on one excuse or another, rationalizing that they have work to do, but really wishing to avoid this unsatisfactory sex contact.

¹ *Vide* p. 164 *ff.*

² *Vide* p. 106 (Case C. O.).

³ *Vide* p. 273.

Thus, Mrs. T. V., aged thirty-seven years, married, with two children, complained of nervousness, irritability, crying spells, fears of "doing something wrong" with weapons. Physically, she was in excellent condition. The patient stated that she nagged at her husband over little things and knew that she was wrong in doing so. She was an accomplished musician, played over the radio, but had to leave work because of her irritability. The husband, nine years older than the patient, made no attempt to arouse her. As a result, she had never reached an orgasm during the entire seventeen years of marriage and consented to intercourse only to oblige her husband. After intercourse, she was left tense, irritable, and frequently trembling all over.

4. Fear of pregnancy¹ is a common deterrent to sexual satisfaction. The pains during labor may be so intense that they leave a lasting impression upon the woman, and as a result, anything which concerns sex and pregnancy tends to be unsatisfactory. In a number of instances, children are not desired, and the fear of pregnancy operates in a similar way.

Mrs. D. I., aged forty-four years, had one child, at the age of twenty-three. Labor was extremely difficult, and it was five days after the onset of her pains before she gave birth to her child. Since that time, sex relations have been extremely unsatisfactory, and symptoms of frustration developed. When menopause set in at the age of forty-two, the patient knew she could not become pregnant again; and since that time the symptoms of frustration have entirely disappeared.

I. C., aged twenty-two years, married for four years, complained of difficulty in catching her breath and of being very excitable. She was perfectly all right until one night, a year and a half before, when she went to a movie, and on leaving, she began to yawn and since that time could not catch her breath. Sex relations were perfectly satisfactory until after the birth of her first child; but their financial status did not permit them to have more children, and being Catholic, she would not use any contraceptives. The result was coitus by withdrawal, and the patient developed symptoms of frustration. The symptoms began three months after the first child was born. When the patient was instructed in the method of "safe period," her symptoms disappeared entirely.

5. Irritations over non-sexual factors frequently leave the woman as well as the man in a state of mind where sex desire is absent. As a consequence, coitus during such a time may bring about only partial satisfactions, and the memory of this partial satisfaction may carry over into the succeeding sex relations and impair succeeding orgasms. Persons should be instructed to avoid sex contact should they find themselves unable to give up their concern over financial, social, or other problems.

¹ *Vide* p. 167 (Case H. I.).

6. Insufficient love-making by the husband is a very important reason for frigidity. The male of the species seems to be able to develop an erection and excitement within a relatively short period of time. Women, on the other hand, are for the most part, in need of a great deal of love-making before they can become adequately aroused. Moreover, in the female the physical element of sex relationship is in itself not sufficient.¹ Great value is placed upon the evidences of affection and care. There are many girls who have an intense, and some who have definite, nymphomaniac desires, but who will not have sex contact unless there is the emotional tone present. In women whose frigidity can be traced to such a factor, it is important to speak to the husband and obtain his cooperation. Frequently a cure can thus be obtained.

7. Improper coordination during coitus itself is an occasional cause of frigidity. Many women with the background of prudishness and inhibitions restrain themselves during the act. This restraint definitely impairs the satisfaction which can be derived. It is a common experience to hear men say, "She lies there like a board," a somewhat crude statement which nevertheless is a pithy condemnation of the wife's reactions.

One woman, for example: Mrs. F. P., aged thirty-seven years, expressed intense dissatisfaction over sex contact. This distaste carried to the point where she developed psychoneurotic illnesses such as pains and aches abdominally, which were used as an excuse to avoid sex relationship. It was found that when she was first married, she lived with her parents and was so intensely concerned lest they hear noises in her room that she made every effort during coitus to restrain not only her movements, but her husband's movements. Obviously no orgasm could be reached; and the habit pattern finally became so firmly established, that when their own home was acquired, coitus could no longer be enjoyed.

In a number of males, there is premature ejaculation and this, of course, leads to a lack of orgasm on the part of the female and, consequently, to frigidity. On the other hand, some women are satisfied only when there is multiple orgasm present during each coitus. When this multiple orgasm does not occur, the feeling of tension results in a desire to avoid any arousal, and consequently brings about frigidity. Many of the factors which influence impotence in the male may also affect the woman, and they all must be considered in getting at the etiologic mechanism.

The treatment of impotence² and other sexual difficulties has been indicated in the discussion of the causes of the various malad-

¹ *Vide* p. 167.

² *Vide* p. 170 (Case S. O.).

justments. Removal of the cause is important if a cure is to be obtained. Insomuch as most sex problems in adult life result from attitudes, it is the correction of these attitudes which is of primary importance. However, the tremendous variations in the amount of sex drive from person to person, and the fact that persons with different amounts of drive may be married, make any general formulation of treatment a difficult one. Moreover, in marriage for example, the lack of excitement, the routineness of sexual activity, and the fact that *once a habit pattern of sexual reaction is established it is most difficult to eradicate* make the therapy of such sex problems as frigidity arduous and often unsuccessful. On the other hand, problems of masturbation and impotence are easily dealt with provided there are no serious complications. In impotence, for example, the explanation of the mechanism of emotion, and reassurance, are valuable adjuncts to the removal of the particular cause involved. In addition, in cases of impotence, if the patient is forbidden to have sex relations for a week (assuming as it were that his impotence will disappear) while indulging in much sex play, it will be found that freedom from the necessity of having sex relations combined with the stimulation from the sex play, will tend to make the patient so potent and eager as to make him disregard the command to wait for a week. Once sex relations have been consummated, impotence generally disappears. However, the success of such therapy varies in proportion to the duration of the illness. In those instances wherein impotence has been present for a few days or even weeks, such as not infrequently occurs among susceptible youths when first married, a cure can usually be accomplished in two or three visits. When, however, the impotence has lasted many months, as was the case of Mr. C. B., aged thirty-five years, who had been married for six months and had been unable to have sex relations during that whole time, the therapy lasted over a period of three months before he was successful and his wife became pregnant. In this case, however, one had to deal with the fact that the patient had masturbated every night, with practically no exception for twenty years, and had never had sex relations. In still other cases a man may be potent with one woman and not with another, and here again it is essential to deal with the etiologic mechanisms. Premature ejaculation is a problem of concern and differs only in degree from impotence. The treatment again is concerned with the causative forces; though it may be added that many men try to develop increased ability to resist ejaculation until the wife reaches an

orgasm by avoiding sex relations, when the therapy should be the reverse of having more frequent sex contacts so that the person becomes less sensitive to stimulation and consequently less premature in his orgasm. Premature ejaculation is particularly common among tense, anxious, irritable, and restless persons "who cannot sit still even for five minutes."

Frustration.—Frustration (L. *Frustratus Frustra*, in vain) symptoms show themselves in many vicarious ways. In the field of sex, for example, when an orgasm is not reached, or dissatisfactions occur in some way or another, the person may show symptoms of irritability, tension, anger, or an entire psychoneurotic complex.

Irritability.—Irritability is the most common symptom of sex frustration. Often after an unsatisfactory sex act, persons, especially women, are left tense, emotionally disturbed; and occasionally they may tremble from head to foot, and cry. In most instances, following such a frustrating experience, the person may not be able to go to sleep for an hour or two; however, in many the irritability remains far into the succeeding days and expresses itself vicariously. Some women develop nagging qualities; are fault-finding; constantly critical; they become suspicious, carry tales, and spread rumors. They often cannot say a kind word, but are full of animosity and irritability. These reaction patterns are the indirect methods of expressing the frustrations due to inadequate sex contacts.

One woman, Mrs. K. D. L., writes the following letter which is exceedingly graphic: "Upon the advice of the doctor, I came back to town last spring to resume my household duties and to attempt another adjustment to married life. Since my advent here, I have improved in some respects, but in others have made no advance. I have taken more interest in my household duties, and have shown more pride in keeping the house clean and in preparing tasty meals, and in keeping up the sewing and in my personal appearance, and in mixing with people. On the other hand, my unreasoning resentments have grown apace, and I seem to be unable to control my spiteful behavior and seem unable to adjust to the conventional life of a married woman. I have caused him much needless worry and embarrassment.

"I get a strange thrill out of trying to see whether I can provoke him to the point of losing his temper, and wait with bated breath for the consequences and tingle all over with a pleasureable sense of excitement and suspense. If he does lose his temper and an altercation follows, one side of my nature gets a strange pleasure out of that. It is true that all this is repugnant to a part of me, and yet these other tendencies seem the stronger, and I am apparently unable to check them. It is just as if I were putting a bomb on a railroad track and dreaded and yet at the same time, wanted to see the wreck. I know this sounds crazy, but I feel you will know what I mean.

"I seem to be irresistibly drawn and tempted to provoke and make trouble in thousands of little ways, just as though I were being drawn by a magnet against my will. I just can't help doing everything I can to pester and annoy my husband. I am ashamed of myself and know I am in the wrong and yet something drives me to it until at times I almost feel possessed.

"Outside the home I am extremely shy and bashful and unsure of myself. I feel tongue-tied and self-conscious and awkward. While I think I have improved to some extent in this respect, I am still very much ill at ease among people, and I believe that this feeling I have in public partly contributes to my unpleasant disposition in the home.

"My destructive tendencies have improved. I cannot understand these things. Sometimes I am aware of what I am doing, and yet seem to be driven by some force against my will to do them, and other times I am not at all aware of having done them until afterwards, when I am confronted with the obvious.

"In regard to my sexual life as a married woman, as mentioned in the above letter, because of my physical make-up, it is impossible for me to perform the normal sex act. This doubtless partly explains my condition. Perhaps the fact that I was a premature child, upon whom a previous attempt at abortion had been made, may also partially account for my condition.

"For these reasons I feel that I am definitely in need of institutional help and as my husband cannot with his present salary afford a private sanitarium, I would like to apply for admission into one of the state hospitals for observation and treatment, and to secure a court order for my commitment."

In the above situation, Mrs. L. had a congenital hip deformity which so bound her leg to the midline (by adhesions between the head of the femur and the pelvis) that entrance of the male organ was almost impossible. Nevertheless, contacts were attempted but were doomed only to arousal without satisfaction. There was no need for institutionalization, and all that was needed to make the symptoms disappear was to clear up the physical deformity.

Tension.—Symbolic symptoms¹ (frequently classified under the terms anxiety states, obsessive compulsions, neurasthenia, hysteria) and even psychotic reactions may result from sexual frustrations. So-called anxiety states are rather frequent and occur particularly when conception is avoided by withdrawal of the penis before orgasm is reached. The lack of orgasm in these situations is particularly intense because, although ejaculation occurs outside the vagina, there is concern over the possibility of pregnancy.

Thus Mr. D. J., aged twenty-eight years, single, complained of inability to concentrate, sharp pains in his head, insomnia, and intense anxiety which frequently caused him to awake in the middle of the night with a very rapidly beating heart and a fear of death. He had been seriously concerned

¹ *Vide* p. 30 ff.

and interested in sex for many years; but on first attempting relationships tried to prevent conception by the withdrawal method. Although ejaculation occurred, he was left tense, excited, and exceedingly uneasy. He ascribed this emotional reaction to the masturbation he had practiced as a child, and continued to get the same anxiety state whenever he practiced the withdrawal method.

Simple advice was curative.

Mrs. F. M., aged twenty-nine years, with three children, stated that sex relations had always been unsatisfactory. She said that though she was not very passionate, she tended to be aroused toward the end of coitus. She had experienced some orgasms before the first pregnancy, but none since then. When they tried to use a condom as a contraceptive, her husband became impotent. On the other hand, when sex relations occurred otherwise, she "did not feel him inside her." The patient developed fears of all sorts. She became afraid to go out alone; she would not go into the bathroom unless someone was with her, lest she take poison from the medicine cabinet. She would not go into the drug-stores, because poison was available there. She feared that she might kill her children; she cried constantly. Her fears, she spontaneously said, were unreasonable and without basis, and yet they persisted in spite of what she did.

In this case, perinorrhaphy plus the use of a pessary eliminated the obsessive symptoms.

Mr. J. D., aged twenty-two years, came in complaining of having had pains in the right side of the abdomen for six years, which lasted from three days to a week and subsided only to occur after several days. In addition, he had a dull ache in his back, felt weak and fatigued, and could not sleep well. These symptoms were markedly aggravated after masturbation. He felt much stronger if he could resist this auto-erotic tendency for a week or two. When the problem of masturbation was cleared up, his neurasthenic symptoms disappeared.

Miss B. T., aged twenty years, complained of numbness in the entire left side of the body and face. This numbness was present for six months, came on suddenly, and was present only on retiring. There was no motor phenomena, and the neurologic examination was negative. This young woman planned to work in a restaurant as a waitress, but her mother objected because of the fear that men might make improper advances. The patient stated that she had no friends, because whenever she went to a dance, or elsewhere, boys made requests of her for sex relations. She had always refused, and the boys then no longer sought her company. When the patient goes out at night, the mother sits up and waits until she returns, and then questions her at great length about possible sex delinquencies. The patient stated, "Maybe she is afraid I will change and give in."

In this perfectly normal young woman, the intense concern over sex on the part of the mother and the abnormal interest thus aroused resulted in frustration symptoms which manifested themselves in numbness.

In some cases, actual psychotic reactions may occur, if there is sufficient constitutional predisposition.¹

Thus, Miss H. N. was found to be acutely excited; pounding on the walls; stating that she heard the voices of men calling her names; and feeling electricity constantly in her genitalia. These symptom reactions and others pointed to the diagnosis of Schizophrenia. On more detailed examination it was found that this woman had had sex contact at an exceedingly early age and had developed nymphomaniac desires. She nevertheless would not allow herself to have any intimacies unless she could convince herself she loved the man. She was unable to obtain sex contacts; became exceedingly irritable, and phantasied constantly during the day and far into the night about sex. She masturbated, but got no relief. The tension mounted constantly until the symptoms mentioned above appeared.

Sadism and Masochism.—Sadism and Masochism may be expressions of sex-frustration. The desire to hurt, and inflict pain upon one's sexual mate is often an expression of anger at not receiving sex satisfaction. In the more violent forms of sadism emotional and sexual trauma² in early childhood play an important role. Similarly in masochism, the desire to be punished before having an orgasm may find its explanation in early conditioning.

Thus, Mr. K. U., aged twenty-seven years, stated that he could not have an orgasm unless he was beaten by a ruler across the buttocks. When the pain reached its maximum intensity, an orgasm followed. On detailed inquiry into the history, it was found that as a boy in school he was very fond of his woman teacher. He worshipped her and followed her about. On one occasion, after he had committed a misdemeanor, she placed him across her lap and proceeded to spank him with a ruler. During this act, the friction engendered by the teacher's knee against the genitalia was followed by an orgasm. The patient's masochistic desires are definitely traceable to the memory of this incident.

Nymphomania and Satyriasis.—Similarly, nymphomania (intense and constant sex desire in the female) and satyriasis (intense and constant desire in the male) may result from emotional blocking of a psychoneurotic nature. These emotions then seek expression in sex as a pleasure substitute or as a vicarious release of general unrest.

Alcoholism.—During alcoholism³ there is often an intense desire for sex contact; and on many occasions, especially in chronic alcoholics, there is a relative inability to have an erection. The combination of the increased desire due to decreased inhibitions and of impotence often leads to projection mechanisms wherein the alcoholic says, as it were, "It is not my fault; it is your fault,"—and then accuses the wife of infidelity.

¹ *Vide p. 265.*

² *Vide p. 107.*

³ *Vide p. 471 ff.*

Homosexuality.—Homosexuality may be overt or latent. In many men and women, intense love for one of the same sex may be the manifestation of a hidden homosexuality. Overt homosexuality may take various forms. There may be mutual masturbation, fellatio, cunnilinguism, or even pederasty. Many homosexuals have no feelings of guilt about the action; but the majority are constantly at war within themselves, feeling that their desires are entirely wrong, and yet being unable to restrain themselves. Not infrequently such guilt feelings will lead to projection mechanisms. Homosexuality is not uncommonly found in Schizophrenia.

One may divide homosexual drives into three groups:

Social.—Wherein homosexual contacts occur among large groups of men or women who, because of circumstances, have no association with the opposite sex for long periods of time.

Constitutional.—Wherein there are many physical characteristics of the opposite sex. Thus, a number of men have a very slight growth of hair upon the chin or chest; have long eye-lashes; a rounded figure; a highpitched voice, etc.; and *vice versa* in regard to the female. These extremes, however, are not in the majority.

Psychosexual Homosexuality.—Wherein there has been sex trauma of sufficient intensity to cause the person either to hate members of the opposite sex, or to like abnormally members of the same sex.

Miss S. S., aged twenty-four years, stated that she had an intense desire to be with women; actually, physical intimacies occurred. She was very nervous, easily irritated, afraid that one side of her face was different from the other, and was sure that everyone stared at her. When she was eight, her brother, aged twenty-one years, forced intercourse upon her. The patient was so much in fear of him that she submitted to it without revealing the intimacy. Later, a second brother also engaged in relations with her; and this practice they continued until the patient was fourteen years old. Since that time, she feels no emotions save disgust in the presence of males and develops actual nausea if men try to flirt with her.

Mr. K. T., aged thirty-six years, liked to dress in women's clothes, and he came to the clinic with the request that he be operated on and have his genitalia removed and a vaginal-like orifice substituted. He was not psychotic, had a responsible position, and apparently adjusted well, except for his concern over the above-mentioned problem. His mother was very eager to have a girl child, but had four boys, the last one being the patient. The mother, feeling disappointed, kept the patient away from boys and dressed him like a girl. She gave him dolls to play with and taught him all the arts taught to a girl. This farce was kept up to the point that when he was six, he was sent to a girl's school, dressed as a girl. When he was seven, "I had the greatest disappointment of my life. My father took me to a barber and had my beautiful hair cut off. When I got home, both my mother and I cried. The next day I was sent to a boys' school, and I did

not like to be dressed as a boy. My pants were rough, and the blouse was coarse, and I delighted in going home, taking off these clothes, and putting on my bloomers and dress, with its bows and ribbons."

It is obvious from the above statement that the attitudes inculcated by this mother were of vital importance in causing this man to have the ideas he had at the age of thirty-six, when he came to the clinic. In many instances the fact that the homosexuality is psychogenic in origin provides a basis for therapy.

The problem of homosexuality is related to: (1) the patient himself and (2) the community. As far as the patient is concerned, there may be a complete acceptance of the homosexual drive with no emotional disturbance. Such persons openly "live with their sex partner," attend affairs with him (or her), and enter into their ordinary life activity with efficiency and dispatch. Many of these persons are intellectually and artistically gifted, and have performed useful and socially important work. Therapeutically, it is almost impossible to reach these persons, so completely centered are they upon their sex perversion and so unwilling are they to give up their practices.

There is, however, a large group of persons in whom the homosexuality is productive of an emotional storm and of guilt feelings. In such a person every attempt is made to avoid an overt homosexual act and when driven to it by emotional compulsion, the patient may obtain temporary relief from his drive but he simultaneously creates a feeling of guilt and emotional distress. In extreme instances, this guilt over homosexual tendencies, whether they be latent or overt, may lead to actual schizophrenic withdrawal and paranoia.

The second problem of homosexuality is related to the influence of such a person upon others in the community. A confirmed homosexual person may persuade and entice young men or young women into similar practices, and not infrequently may engage in sex practices with young children, in a peculiar effort to avoid opposition and detection. Such sex practices will often result in the personality distortion of many relatively normal persons and, hence, from the community point of view is dangerous.

The therapy of homosexuality must be preceded by a socio-psycho-biologic analysis of its causes. Frequently, one will find that the distortions of sex are but one of the many distortions of the entire personality towards other phases of life. Neurotic tension and symbolic symptoms occur in relation to many social, economic, and personal problems. Frequently, these persons have

a tremendous feeling of inadequacy, and there may be vivid memories of a childhood setting of unhappiness, insecurity, the feeling of being unwanted, and in which situation a feeling of emotional security was obtained from a person of the same sex. In therapy the usual process of changing the attitudes of these persons towards their difficulties, as outlined in Chapter IX, will furnish a stable base for the cure of their neurotic homosexual drive. In addition, there should be a formulation to these patients on the normalcy of the sex drive, and the basic bisexuality of the human embryo. They are then shown, on the basis of the facts learned in the socio-psychologic analysis, how their normal emotional drives were deviated from the normal heterosexual direction because of the *conditioned* aversion to members of the opposite sex and/or *conditioned* affection for the same sex. The problem, then, for the patient is to "de-condition" himself by the process of re-orienting his attitudes. All the techniques of a socio-psychobiologic resynthesis should be used in this therapy. Many persons will respond quickly—provided only that they are willing to co-operate. Marriage, itself, is no cure, for many of these persons have already attempted marriage as a solution, and have failed in that relationship.

From the social point of view, the homosexual person should be dealt with according to the way he affects the community. Each case should be treated on its individual merits. It is the author's feeling that an offender who repeatedly engages in sex play with children is a relatively incurable social menace and should be dealt with as such. Adult homosexuals, who have found "a partner" and who are willing to engage in therapy may be treated while in the community. Between these two extremes are all variations and degrees of homosexuality, and the social therapy should vary according to the problem involved.

SEX AND SELF-DISCIPLINE

The healthy male or female when frustrated may consciously direct his reactions into constructive sublimation.¹ One may speak of frustrations as arousing energy (in this case, by sex dissatisfaction), which needs to be expressed.² If a person can direct this energy wisely, no unhealthy symptoms will appear. Violent physical exercise is only a partial relief; but work of intense and interesting character frequently furnishes an excellent sublimation, as do social and recreational activities. All are outlets for energy

¹ *Vide* p. 83.

² *Vide* Ch. XII.

which is not adequately relieved through sex contact. It matters little what form the energy release takes *as long as it interests* the patient and gives him a feeling of pleasure.¹ The more these sublimated activities give one a "kick," the fewer unhealthy frustration symptoms will there be. It is these suggestions which the physician must give to those for whom adequate sex contact is not available.

It is well to stress the desirability of self-discipline in sex and other pleasures, as opposed to ignorance, repression, and external discipline. *Self-discipline consists of the ability to postpone immediate gratification and to do whatever may be necessary, even if it is unpleasant, for the sake of long-term satisfaction.*² Self-discipline, therefore, means more than a simple determined following-out of a set pattern of behavior, regardless of temptations. It implies, most of all, that the mental process be so disciplined that facts will be faced as they are,³ and that rationalizations⁴ will be minimized. One of the most difficult tasks to perform is this *mental self-discipline*. On occasion, it may be carried to an extreme, in the so-called "iron-willed"⁵ person, who takes the attitude that most things that are pleasurable are to be avoided, and delights by such denial in proving his "own strength." Such exaggerations carry dangerous connotations for ultimate personal and social happiness.

In knowledge and action involving sex, it is far more valuable for the person to be able to understand his limitations, capacities, and long-term satisfactions with self and society considered, than for society, by its taboos, to keep information and discussion away from him. The first course is conducive to self-direction and sympathetic control; the second to repression, vicarious satisfactions, distorted emotional relations, and the need for excessive external control.

¹ *Vide* p. 253.

⁴ *Vide* p. 76.

² *Vide* p. 246.

⁵ *Vide* p. 214.

³ *Vide* p. 208.

CHAPTER VI

THE PRINCIPLES OF PSYCHOTHERAPY

SINCE neurotic symptoms, expressed through both tension¹ and symbolism,² are immature or unhealthy personality reactions to stress, the fundamental treatment of neurotic symptoms should be directed at: (1) removing excessive stress, (2) eliminating immature and unhealthy personality traits, and (3) substituting mature and healthful reaction patterns with which to meet future stresses.³ It will be noticed in this statement that no mention is made of treating the symptom of which the patient complains. Symptomatic therapy when used alone, as will be discussed later,⁴ usually fails, for the cause of the symptom continues to operate. Symptomatic therapy may be used in conjunction with "causal" therapy; but the patient should understand the temporary nature of superficial therapy, and should direct the greatest part of his efforts in the more important direction. The physician can explain to the patient that one treats the tuberculosis and not its symptomatic cough; that one treats the pneumonia and not its associated fever; that one treats the basic emotional and unstable reaction patterns and not the neurotic manifestation. One of the great difficulties in all therapy is the tendency to treat the symptom without getting at the cause thereof.

A SOCIO-PSYCHO-BIOLOGIC ANALYSIS

Personality reactions, mature or immature, healthy or unhealthy are the result of the constant interplay of biologic, sociologic, and psychologic forces. Consequently, in order to understand the normal or the neurotic personality it is important that there be a thorough study of the person from the physical, social, and psychologic aspects.⁵

A diagnosis of symbolism⁶ or of tension symptoms should always be deferred until a thorough *physical examination* has been made.⁷

Not infrequently "neurotic" symptoms turn out to be in reality

¹ *Vide* p. 30 *ff.*

² *Vide* p. 33 *ff.*

³ *Vide* Ch. VIII.

⁴ *Vide* p. 183.

⁵ There are other important aspects of influence. Dr. W. F. Petersen, for example, has pointed out the significance of meteorologic changes in the formation, growth, and diseases of organisms. At the moment, however, these factors are not understood sufficiently to suggest therapeutic measures.

⁶ See Chap. I for a discussion of the nature of neurotic symptoms. See also Appendix I.

⁷ *Vide* p. 179.

the earliest signs of an apical tuberculosis, or an exophthalmic goitre. It is the mild lesions of a toxic or infectious nature which are so often responsible for errors in diagnosis. Consequently, the physical examination of the neurotic patient should be even more thorough than that of the patient who is obviously physically sick. One should not be wasteful of laboratory procedures; but if there is any suspicion of disease, then the x-ray, blood count, sedimentation rate, and any other procedure deemed necessary should be carried on. I have seen patients suffering with severe headaches and diagnosed as "neurotic" cured when x-ray showed the sphenoidal sinus to be "cloudy" and drainage was subsequently instituted;¹ patients with "emotional diarrheas" cured after the belated stool examination revealed ameba; patients markedly depressed and suicidal for over a year, cured in three weeks after the proctoscopic examination revealed an ulcerated bowel full of pus. Moreover in such instances, it is of the greatest value to have examined every possible cause of disease at the beginning of the treatment, rather than later; for the psychotherapeutic efforts are facilitated when the patient knows how thoroughly he has been scrutinized for any pathology.

There are some patients, however, who, going to the opposite extreme, will insist that there is some physical basis for their ailment, despite all sorts of physical and laboratory examinations to the contrary, and despite many positive evidences of neuroses. These persons may attribute a major neurotic disturbance to some mild physical ailment. The physician must be prepared to *evaluate* the *relative* role of the pathology and the emotion: to exercise his judgment in the making of his diagnosis. Despite the significance of a careful physical examination one should not minimize the equal importance of emotional forces. At all times, common sense² must prevail.

Social Forces.—Social forces because of their extensive implications are of utmost importance in the formation of any personality. These influences, beginning with the parental environment, and extending through the whole gamut of life's forces, have varying effects depending not only upon the nature of the social pressure, but also upon the state of the constitution at the time.³

¹ *Vide* p. 179 (Case of Bob H.).

² *Vide* p. 45.

³ Common sense (though uncommon) is the ability to see the part in relation to the whole; it implies a true perspective of the relative importance of any fact or idea. Common sense is a comprehension of the total situation; and upon this faculty are elaborated the rules of science whose function it is to systematize and explain the details.

Each stress leaves behind some trace of its influence, and this trace continues to manifest itself in later life in proportion to the intensity of its effect and the susceptibility of the organism. Consequently, it becomes important to inquire into the social pressures (1) existing at the time the patient comes in for treatment, (2) those existing at the time of the onset of the illness, and (3) those which have existed as determining mechanisms from early life. This information can be obtained from the patient, from the wife or husband, from friends, siblings, or parents. In many instances, social agencies, school teachers, and others are of aid.¹ The more facts one has at hand, the better the diagnosis of what is and was wrong and the better insight will the physician have with reference to the characteristic type of response manifested by the patient. It is necessary to know what pressures exist at the time of treatment in order to be able to understand the obstacles to the treatment; knowing the social pressures existing at the time of onset of the illness will facilitate the explanation of why the particular tension and symbolic symptoms occurred; and determining the forces existing earlier in the patient's life will enable the physician to understand the susceptibility of the patient.

Psychologic Aspects.—Finally the psychologic aspects, usually the most important to investigate, reveal much of the susceptibility of the person to the stress. Practically, the physician needs to determine *what emotional reactions*² resulted from the stress; in other words, he must remember that that which might be a serious blow to a person at one time might at another be considered a casual incident. For example, one patient lost \$20,000, his life's savings, in the 1933 bank crash, and accepted the loss with resolute equanimity; whereas one year later, when the patient lost his executive position, he became acutely neurotic, and developed a symbolic aphonia.³ It is not the stress as such, but that which the stress represents to the person that is significant as to the results produced. The loss of the job may have been the "last straw," or the person may have changed, or the values may have been different. In any case it is significant that the stress itself is important only as related to the patient's attitude toward it.

The patient's attitudes and the patterns of reaction which he has built up toward himself and towards others as a result of early training are the most important elements in the creation of neurotic tension and symbolism. Many of these attitudes are conscious and

¹ *Vide* p. 156.

² *Vide* p. 36.

³ *Vide* Ch. VII (for technique); Ch. VIII (for significance of stress).

obvious to the person himself; but many attitudes are automatic and unconscious both in their expression and in their origin. Persons like, dislike, love, hate, fear, or enjoy specific ideas or things, without having any clear idea of the why of their emotional attitude, or with only some secondary and rationalized reason to explain their feelings. In the neurotic patient (indeed in many so-called normal persons); these unhealthy and immature attitudes and their attendant reaction patterns are responsible for the appearance of tension and symbolic symptoms. It is important to determine these underlying attitudes,¹ because irritations which have existed from earliest childhood may continue to exist in memory and continue to act just as if they were still actually present. In order to remove an unhygienic pattern of reaction it thus becomes necessary to remove the continued underlying irritation. These irritations are spoken of as being frequently "unconscious";² yet these unconscious memories may be elicited by conscious discussion with the patient as well as by other techniques (free association, dream analysis, etc.).³ When the word unconscious is used in this sense, we do not mean that which is forgotten; it is rather used in the sense that the patient is unaware at the moment of the unconscious force which leads to symptoms. Thus an employee may become furiously angry over some trivial incident at home, without being consciously aware that he is releasing hitherto unexpressed anger evoked by his employer's criticism. At the time of his outburst against his wife, the employee is "unconscious" of the fact that his real anger is against the man who abused him. Ordinary discussion with the patient would quickly elicit the fact of his emotional suppression. In the same manner, though in far more detailed fashion, and searching far back in the patient's life, the physician attempts to unearth the "unconscious" mechanisms which without the patient's awareness play their role in producing symptoms of tension and symbolism.

A SOCIO-PSYCHO-BIOLOGIC RESYNTHESIS⁴

However, the mere making of such a thorough analysis of physical, social, and attitudinal factors is in itself not sufficient. It is not enough to understand intellectually what is wrong and what is right. It is essential for this therapy that each person apply and make automatic that which he understands. Many patients will spontaneously state that they are not acting as they

¹ *Vide* p. 138. ² *Vide* p. 72 (footnote). ³ *Vide* Ch. VII. ⁴ *Vide* Ch. IX.

should and they know what they should do; but they are unable to apply their knowledge. Consequently, the physician needs to resynthesize the patient's attitude and reaction patterns in such a way as to eliminate immature and unhealthful responses, and inculcate mature and healthy reactions.

As one analyzes the causes, one provides for the therapy of the physical "dis-ease," advises on the treatment of the social problems, and outlines a procedure for retaining the attitudes of the patient. The physical disturbances should be dealt with according to their requirements,¹ and at the same time the patient should be made aware of just how much of a factor in his illness is his physical condition, and to what extent the social and psychologic forces are involved. In other words, the patient should be made to understand that the cure of his "actual" physical disease is inadequate to cure all his physical symptoms; he must learn the necessity of curing the emotional disturbances as well. Such emphasis is of vital significance as we shall see later. The medication used should be as specific as possible for the ailment; and, moreover, adjuncts which are of doubtful value should be avoided, in order to emphasize doubly the need for the patient's cooperation.

The social stresses present a special problem. Just what constitutes a stress is a problem to be considered. Many patients will attribute their illness to financial difficulties, to social pressures, to domestic squabbles, to employment; yet on longitudinal examination of the patient's life, one will often find that the patient has in the past suffered similar difficulties without developing symptoms of tension or symbolism.² In other words, the patient is at the time of development of the neuroses, more susceptible because of intrinsic changes, because of the cumulative effect of stress, or for other reasons. Moreover, many of the stresses which according to the patient produced the illness, often are not stresses to the average person. Most persons are under constant environmental pressure of various intensities without going into "nervous breakdowns." "Normal" persons may be unhappy and distressed over unfortunate situations, but tension symptoms arise only temporarily and the situations are quickly adjusted to. The psychoneurotic patient is, in the usual situation, more susceptible than the "normal" person to stress.

Consequently, in dealing with social stresses, the physician should determine in his own mind, whether the particular stress is justifiably strong enough to produce symptoms in the "normal"

¹ *Vide* p. 158 ff.

² *Vide* p. 30 ff.

person. If the stress is unduly severe, then the second portion of the therapy (*i. e.*, after treatment of physical disorders); is aimed at removing the stress, removing the patient from the stress, or advising the patient how to deal with the stress. If these efforts fail, or if the stress is one which occurs in the usual scheme of things and cannot be eliminated, then it becomes necessary to attempt to retrain the patient so that he will be able to avoid developing neurotic tendencies when he is under difficulties.

One may *remove the stress*¹ in such instances as those wherein there are cooperative relatives who though well meaning, are themselves sufficiently unstable as to create the social pressure that produces emotional tension in the patient. In children's behavior disturbances² the most effective therapy consists of removing the stress which lies frequently in the parental maladjustment. In actual practice in children's cases, one treats the parent much more than the child. When the situation is such that one cannot remove the stress, one may often *remove the patient from the stress*.³ Not infrequently, for example, the patient labors under adverse working conditions, which may produce harmful emotional results; removal of the patient from such employment is often of great value in therapy. Finally, in the treatment of social factors, one may give the patient some *common sense advice*⁴ on how to deal with stresses which cannot be removed. One can instruct the maladjusted adolescent on how to live with neurotic parents, one can advise the patient on diplomatic methods of dealing with unreasonable employers, one can recommend the study of another trade or profession, and so on. There are many limitations to and even dangers in giving such advice, as will be discussed more fully in the next chapter; but when used judiciously such advice may be invaluable in the therapy of the neurotic patient.

The main efforts at therapy, however, are to be directed towards the *changing of the susceptible personality*. This susceptibility stems (exclusive of constitutional predispositions) from the immature and unhealthy attitudes and patterns of reaction instilled in the person from early childhood and throughout life. Many persons

¹ *Vide* Ch. VIII.

² It is interesting to note that in children unhealthy reactions are spoken of as behavior disturbances; whereas in adults similar though more involved reactions are termed neuroses. *The adult's neuroses are indeed behavior disturbances*; the adult's symptoms are those of tension and symbolism just as are the child's behavior difficulties. Many persons have attempted to read mysterious causes into the adult neuroses, instead of recognizing the same pattern of behavior in the child and adult, differing only in complexity. (See Appendix I.)

³ *Vide* pp. 160-161 (Cases N. H.; L. S.).

⁴ *Vide* p. 169 (Case F. S.).

with neuroses are trained by circumstance to over-react, to react by being fearful, to be egocentric and subjective in their evaluations, and so forth. These reaction patterns have become automatic within the patient, so that when a new situation arises which carries some form of stress, the patient responds almost reflexly in an immature and unhealthy manner, and with the side symptoms of tension and symbolism. The principles of this therapy consist of: (1) bringing to conscious attention in specific detail the unhygienic attitudes and their attendant irritating memories, (2) removing the emotional tone attached to the memories by intellectual understanding and by desensitizing¹ the patient through repeated discussions, and (3) retraining the patient so that he will react automatically in a hygienic, efficient, and non-symptom forming manner to the various stresses of life. It is of the utmost importance to remember that the person needs to learn to respond automatically in a healthful manner; consequently, intellectual understanding of what one should do is insufficient.² This automatic response is *learned by the adult only by persistent conscious effort*. The rapidity of such learning is dependent upon the number and intensity of the immature attitudes, the cooperation of the physical and social forces, and the amount of effort exerted by the patient. Time is an important element.³ When these basic attitudes and reaction patterns are made normal, the individual responses will no longer carry undue signs of tension or symbolism and the patient's neurosis will cease to exist.

In actual practice it is not always possible, and often it is not advisable to attempt a thorough retraining of general and specific attitudes. Such attempts require a tremendous amount of effort and expense, and often seriously interfere with the patient's pursuit of the requirements of ordinary life. Consequently, in many instances if one is able to determine the immediate causes of the symptom and to remove them, one may thereby produce a clinical recovery.⁴ In many patients the background is so unstable as to facilitate a quick recurrence of another neurotic symptom; but there are many other patients who have sufficient recuperative powers, and who are sufficiently stable to make a satisfactory adjustment with comparatively little therapy.⁵ In these latter instances, it is the stress which is usually more severe than usual; and the treatment of such stress and the inculcation of adequate attitudes toward it often are all that is needed for the immediate

¹ *Vide* p. 182

² *Vide* p. 196.

³ *Vide* pp. 137; 209.

⁴ *Vide* p. 260

⁵ *Vide* p. 305 (Case K. D.).

recovery.¹ Despite this "short cut" method, however, one should always bear in mind that the more thoroughly one follows the principles described above, the more stable will be the personality and the more resistant will it be to future stresses of similar intensity.

TECHNIQUE OF ANALYSIS AND RESYNTHESIS²

The technique of analyzing the physical difficulties falls within the realm of general medicine. The usual physical examinations plus laboratory studies should be made before psychotherapy is seriously instituted, so that the patient will not be able to say that there is no proof of his lack of physical disease.³ The analysis of the social factors can be done by obtaining information from persons who know the patient, or from the patient himself. The former technique consists simply of questioning relatives, friends, and others about specific points in the development of the particular patient and about any other information which they may give. In such interviews, it is important that the consent of the patient be obtained, and that the physician be careful not to violate the patient's confidence in any manner. Moreover, the physician should refuse to "label" the patient with some name, for too often friends and relatives will use such information to berate or reproach the patient. A more detailed discussion of this social analysis will follow in Chapter VIII.

*Determining the basic attitudes*⁴ and reaction patterns depends for the most part on eliciting subjective information from the patient. In this portion of the analysis, the physician needs to understand what motives guide the patient, and what he "feels" in his reactions to life situations about him. In the last analysis, a situation is irritating or not (except for actual physical danger) in proportion to individual sensitivity and attitude.⁵ Most of these attitudes can be *determined by direct discussion*.⁶ If the patient is permitted to tell his own story, and the physician is trained to recognize the significance of slips of the tongue, over-emphasis, associated mannerisms, etc., most of the pertinent information can be quickly elicited.⁷ With practice, the physician can soon learn to put the patient at ease, and to make the patient feel that he can unburden his troubles without fear or restraint. When the patient has apparently exhausted his information, the physician can then ques-

¹ *Vide* p. 139 (Case F. B.).

⁴ *Vide* p. 174.

⁷ *Vide* p. 143.

² *Cf.* Ch. VII.

⁵ *Vide* p. 158.

³ *Vide* p. 179.

⁶ *Vide* p. 140 ff.

tion him about early childhood relationships, school difficulties, adolescent problems, social, marital, financial, and other difficulties. One should be careful not to hurry the patient. This directed examination is in most instances entirely adequate, but should additional information be necessary, other techniques, such as free association and dream analysis¹ may be used.

Treatment.—Treatment of the physical difficulties (like diagnosis) is in the realm of physical medicine. However, in view of the tendency of many psychoneurotic patients to over-emphasize the presence of any illness, it is wise to state, in a casual and under-emphasizing manner, the nature of the illness and the procedures to be followed in its cure. Reassurance that the therapy will be effective should be given repeatedly.

The therapy of *social stresses* has already been outlined. Much can be done via the cooperation of the mate, the parents, the friends, the relatives, the employer, the social agencies. Though the physician should not hesitate to utilize all these sources in the therapy of the patient, it is nevertheless true that most of the social therapy will have to be along the circuitous route of first changing the patient that he may in turn ameliorate the social situation.

The therapy of the patient's *attitudes and patterns of reaction* which are at the basis of the neurotic predisposition is directed at: (1) *Specific attitudes*² which are removed and replaced by: (a) intellectual understanding of the *cause* of the attitude; (b) desensitization toward the old and emotional acceptance of this newer outlook,³ and (c) conscious redirection of thought and action processes so as to break unhealthy *habits* of thinking and feeling and instil healthy ones, and (d) use of adjuvants as drugs, suggestion and hypnosis, and (2) *general attitudes*⁴ and patterns of reaction which are removed and replaced by consistent and persistent training.⁵

As the discussion reveals specific attitudes or reaction patterns which are in themselves unhealthy and which have contributed to the emotional instability of the patient, the physician enlists the cooperation of the patient in ascertaining *the origin of the particular attitude*. When the cause, or more usually causes, are determined, the patient's reaction to the causes is discussed, and the better attitudes which should have been used are suggested in order to remove any resentment still existing in the unconscious. Repeated discussions will desensitize⁶ the patient to the irritations

¹ Vide p. 144.

² Vide p. 177 ff.

³ Vide p. 196.

⁴ Vide pp. 174-177.

⁵ Vide p. 179.

⁶ Vide p. 182.

dynamically forgotten.¹ Thus one patient had a dominant reaction pattern of automatically criticizing practically everyone she knew.² On investigation it was found that one of the causes of this reaction pattern was the attitude of her mother, who had constantly berated her as a child and had produced an intense sense of inferiority. In compensating for this inferiority the child had developed the pattern of attacking others before she could be attacked and criticized; and this pattern had carried over into her adult life. The patient still carried with her memories of her mother's nagging and condemnation, and continued unconsciously to react to them as if they still existed. The discussion that ensued demonstrated to her, not that she should avoid being condemnatory (for the desirability of this avoidance was obvious), but that there was a definite origin for the pattern, and that instead of reacting to the memory of her mother's criticism in an unhealthy manner, she could learn to react to this particular cause by understanding its origin, and by assuming a non-hostile but understanding attitude toward her mother. In other words, each specific attitude or pattern of reaction is dissected, and its origin traced. The patient is then trained by conscious direction to face in an adult and mature fashion the original cause of the difficulty. It cannot be emphasized too strongly, that general advice is almost valueless. Specificity of analysis, dealing with specific situations, and giving specific advice and comments are essential. In most instances, the more detailed the information given the patient, the easier is it for him to follow. Rather than tell a patient to "keep busy,"³ one should discuss with him what he can do, and when he can do it. Some patients require an hour by hour schedule. Good results often are obtained by such specificity when the giving of general advice would avail nothing.

The patient should understand intellectually the origin of each specific immature attitude, its function, how and why it is ineffective or harmful, and be shown a more mature method of meeting the specific situation. Here again it is important not to state merely that the patient's point of view and action are wrong, but to examine in detail just how the attitude arose, what was the role of the environment, of the parental attitudes, of the school situation, etc. Often a patient is emotional because the mother was emotional,⁴ and the patient imitated the immature response. Often there was inculcated a feeling of inferiority, by condemnation, or

¹ *Vide* p. 70.

² *Vide* p. 253.

³ *Vide* p. 271 (Case I. L.).

⁴ *Vide* pp. 162 (Case M. P.); 175.

by inadequacies in certain fields,¹ which attitude prevails in adult life. Often a person is sadistic because early in life he was cruelly treated and has compensated by treating others cruelly. It is just such facts which the patient should intellectually understand, and not simply be told that it is "wrong" to feel emotional or to feel inferior or to be sadistic. The very understanding of the cause of one's attitudes tends to remove much of their unhealthy force.

Intellectual understanding of the cause should then be followed by intellectual understanding of how he should now act and feel not only towards present conditions, but toward the memories of the original irritations. He needs to know not only that he has no basis for feeling inferior now, but that there was no real basis for feeling inferior then. He should not only understand that his own instability is probably a reflection of that of his parents, but also he needs to understand that most of the fears which have existed unconsciously since then should be faced now with calmness and decision. He should understand that his unhealthy "mental" attitudes towards all those things about which he has been concerned need to be discarded and healthy attitudes substituted. Actions which started in the past and which still exist should be discussed in detail and discarded where advisable. Detailed fears, hates, wishes, and emotions which are unhealthy should be examined and if they continue to exist, should intellectually, at least, be discarded. The patient should have a clear concept of what is expected of him in regard to these unhygienic attitudes.

In such intellectual appraisal of what is wrong and what needs to be done, it is important to avoid blaming the patient, or criticizing him. The physician is neither a moralist nor a judge; it is his duty to analyze causes and prescribe the remedies. Such objectivity is important not only because it lessens the patient's feelings of guilt which tend to perpetuate the neuroses, but also because the objectivity of the physician is an attitude to be copied by the patient whose major fault usually is excessive subjectivity. To tell a patient, for example, that his beliefs are childish and emotional and that they have no basis other than wishful thinking will do little more than put him on the defensive and call into play such mechanisms as withdrawal² and rationalization.³ On the other hand, unearthing the origin of the specific belief, and demonstrating its immaturity and inefficiency not only has the virtue of being a factual and truthful technique, but also makes the patient

¹ *Vide* p. 160 (Case O. N.).

² *Vide* p. 72.

³ *Vide* p. 76.

coöperative, and points the direction toward the better way of responding.

Intellectual understanding is, however, not enough.¹ The patient must be willing to change the underlying attitudes and must *accept emotionally* that which hitherto he has refused to accept. Many patients will say that they know what to do, but they can not make themselves do it. Emotionally their response has been so long in a direction opposed to the one offered by the physician that it is difficult for them to "feel" the way they have reasoned out they should feel. Or to put it another way, one may say that despite the advice of reason, habitual emotional responses tend to direct the course of action.

To overcome this habit obstacle, the physician needs to establish sufficient rapport with the patient so that the attendant confidence, respect, and desire to live up to the physician's expectations will overcome the resistance of habit. The degree and rapidity of cure are in large measure dependent upon the degree of rapport. *Rapport*² is more dynamic than simple confidence or trust. Rapport implies a common meeting ground, a mutual appreciation, a "speaking of the same language." The patient sees in the physician one who understands, sympathizes, and guides. He feels that the physician has evaluated him and appreciates him for his assets, even though they may for the time be outnumbered by his liabilities. Rapport has the quality of "liking" in addition to the factor of confidence. When rapport has been established, the patient will have not only the intellectual realization that he should change, but also the emotional "feeling" that the physician wishes to aid him in the change; he will have a sense of moral support while he is changing, and consequently, a conviction that his efforts toward change will be successful. The success of some physicians and the failure of others is often to be explained in terms of their ability or lack of ability to establish such rapport.

Indeed there is no other field of medicine in which the personality and attitude of the physician are of such great value and importance as in the treatment of the neuroses and psychoses. One physician may bring about a cure while another, apparently using the same method, fails egregiously. Charlatans and certain "faith cults"³ are able to obtain cures (only of neurotic symptoms, however) in direct proportion to the magnetism of the associated personality and the "faith" it inspires. Such cures can be only temporary, since the basic causes of the neuroses are left untouched;

¹ *Vide* p. 196.

² *Vide* p. 195.

³ *Vide* pp. 222; 237.

but the fact remains—and it is a fact of transcendent importance—that emotional belief in a cure is curative in itself. If the patient believes strongly in a cure, regardless of its source, by his very belief he at once obtains sufficient moral support and courage to *face all his problems*¹ with some degree of equanimity; and in this way his specific problem loses much of its emotional (and therefore neuroses-producing) character.

Some physicians seem to have a natural “bent” for therapy, and are able to establish rapport and confidence more quickly than others. There is an “art” in psychotherapy, an art which like that of music or painting can be greatly aided by study and by experience. One of the most important factors in the development of this art is the physician’s sincere interest in his patient’s problems. There is no substitute for real interest in the patient as a suffering human being. Such interest makes the physician more than a doctor; he becomes a friend whose concern it is to help one extricate one’s self from the morass of emotional conflict. The patient’s response to such friendship is to do gladly what the physician advises, for the patient knows that the physician will aid, support, and encourage him.

Pampering is to be avoided. Helping a person who is ill, however, whether the fault be his own or some one else’s, is not pampering. The patient must understand the fact that although the physician will provide moral support, give constant reassurance, advise on problems to the best of his ability, the patient must simultaneously make every effort to face the facts courageously, must learn to rely on his own powers of analysis and action. Honesty is respected and appreciated by the patient, if the explanation is tactfully and sincerely given.

Confidence is increased when the physician seems to be certain in principle what is wrong and what needs to be done. Definiteness in diagnosis (including definiteness in stating what one does not know) plus decisiveness in action provides encouragement for the psychoneurotic patient, who usually has an inherent lack of decisiveness. Realization that the physician has a clear cut formulation in his own mind communicates itself to the patient, and is extremely reassuring. Even where rapport is not established at first, confidence in the physician is established when the patient feels he is in capable hands. Hence, much training and experience are advisable for those who would deal with persons who suffer. On the other hand, dogmatism is far from reassuring for it indi-

¹ *Vide* p. 208 ff.

cates an inflexibility, built too often to overcome a fundamental insecurity.

Simultaneously with giving intellectual explanations and establishing confidence and rapport, the physician instructs the patient on how he can translate his intellectual knowledge of what is to be done into automatic responses of the personality. This technique involves consistent and persistent conscious efforts to apply the principles learned to every detailed and specific situation in life to which they can be applied. The patient must set up his goal, the attitude to be removed and the attitude to replace it, and continually orient himself toward such a goal. The patient must train himself to do that which he knows he should do, and only by effort can he carry out this training. There is no royal road to the development of a healthy and mature personality. Yet with the application of effort, the patient can learn to react differently. In actual practice, one finds that old as well as young persons can radically alter their method of response. Under ordinary circumstances¹ most persons can be successful enough to remove unhygienic and neurosis producing traits and develop the habit of reacting in a mature fashion. The physician needs to iterate and reiterate the necessity of continual application of the principles outlined.

The removal of the fundamentally unhygienic general reaction patterns is carried out almost purely by retraining. Each general attitude, such as discussed in detail in Chapter X, should be understood as to its origin as much as it is possible,² after the manner of removing specific attitudes; and then by dint of repeated analysis, of specific illustrations of this general attitude,³ and by guiding the patient along mature methods of response, and by cooperation of the patient,⁴ new reaction patterns will be formed. The most important elements in changing the fundamental, life-long general attitudes, is consistent persistency. If the newer and healthier form of response is clearly defined and illustrated in many ways by examples from the patient's own experience; and if these ideas are presented with sufficient repetition to the patient, he will eventually adopt the suggestions given. There are many handicaps, however, and these are discussed in detail in Chapter XIII, on prognosis.

At first the patient will fail.⁵ The patient must be warned of his likelihood to initial failure; but he must also be reminded that

¹ *Vide* Ch. XIII.

⁴ *Vide* p. 227.

² *Vide* pp. 131; 192.

⁵ *Vide* Ch. XIII (curve of improvement).

³ *Vide* p. 184 ff (Case S. G.).

learning a new trait does not differ essentially from acquiring a new skill, that one makes many errors before arriving at a successful outcome. A patient whose attitudes have been established after decades of experience cannot be remade in a few weeks or even months.¹ It takes time, much time, for the newer attitudes to become so integrated as to be automatic in their response.

Moreover, the factor of habit plays an important role. Once a pattern is established, it tends to perpetuate itself even though the underlying cause has been removed.² Only time and persistence toward the goal of a more mature habit can overcome the inertia which is associated with already established traits.

Adjuvant Therapy.—This consists primarily of the use of *drugs*, *suggestion*, and *hypnosis*.³ These should always be used only as adjuvants in the therapy of the underlying immature attitudes. The drugs used, exclusive of those needed for actual physical pathology, are directed at the tension symptoms, and should be of the sedative type. When drugs are given, the patient should be informed of their purely palliative nature.⁴ Suggestion and hypnosis are also of value; but here again, it must be remembered any therapy which does not treat the cause, is rarely permanently therapeutic.

The utilization of these procedures will facilitate the removal of the specific distorting attitudes and substitute hygienic and mature patterns of reaction. Yet each specific emotional problem has as its background some general emotional problem,⁵ hence the difficulty in attempting to correct any specific trait without dealing with those general immature attitudes which constitute the unstable base upon which specific difficulties can arise. Therefore thorough specific therapy implies adequate general therapy; and thorough curative measures carry within themselves the basis for future prophylactic procedures. Psychoneurotic patients who are adequately treated learn not only to remove the particular emotional difficulties which appear to them to be uppermost, but also to lay the foundation for future emotional stability and mental hygiene.

¹ *Vide* p. 114 (Case C. B.).

⁴ *Vide* p. 237.

² *Vide* p. 283.

⁵ *Vide* p. 177.

³ *Vide* p. 230 ff.

CHAPTER VII

TECHNIQUE OF ANALYSIS OF PERSONALITY DIFFICULTIES

EFFECTIVE treatment of the psychoneuroses is dependent upon the physician's ability to find the basic cause for the existent condition. He has special difficulties not present in other fields of medicine. There are no thermometers with which to grade spiritual fever; no x-rays with which to determine the extent to which a personality is broken. The analysis of the personality is an extremely personal problem; and the "art" of analysis is as important as the "science" of analysis.¹ This fact is even more true in the resynthesis of the individual personality, as we shall see later.

A person's reaction patterns are the result of three main factors: (1) stress² as it affects the (2) inherited constitutional pattern³ which has been modified by (3) internal and external environmental factors. Understanding the "why" of a person's reactions, therefore, requires a study of these three forces⁴ in the time and setting of their occurrence. In some patients in whom the maladjustment is mild, one may be able to ascertain the precipitating factors in one or two visits. In such persons, it may be totally unnecessary to go into detailed analysis provided there are sufficient elements within the personality to permit a quick reintegration, once the irritants are removed. In other instances, however, where the basic personality pattern has been unstable since infancy, or where it has existed a long time, it may be necessary to see the patient for many months. The difficulty in analysis lies in the tendency of the patient unconsciously to repress memories which are vital and continuously active in the person's reaction patterns. It is the unearthing of these (dynamically)⁵ forgotten memories that necessitates the use of some of the special techniques described in the following pages.

¹ *Vide pp. 134; 135.*

² Stress is obviously an environmental factor which having acted, becomes integrated with the personality experience. It must be recognized that man acts as an integrated organism, each succeeding environmental or external influence becoming an integral part of the internal influence. The organism so changed may respond in an entirely different fashion should it be confronted by the same stress later. However, throughout this book, *Stress* is arbitrarily differentiated as the precipitating factor of the illness.

³ *Vide pp. 25; 26.*

⁴ *Vide p. 45.*

⁵ *Vide p. 65.*

F. B., aged nineteen years, was referred by her high-school teacher. She complained of being easily irritated, of crying on the slightest provocation, of feeling "sickly," by which she meant being "weak," and "taking everything too seriously." Three years before, she would become "hysterical" at times, and "would breathe heavily and feel half-conscious of what was going on."

Florence had been going "steady" for three years. She was in love at first, and it was when her fiance first kissed her that she developed these "hysterical" spells. They had talked of getting married, but he was only a year older than she and had no prospect of employment. Resenting his inability to support a wife and the necessity of postponing the marriage, he became irritable. As a result, the patient complained, "He doesn't seem to understand me. He's self-centered and isn't nice to me the way he used to be. I don't seem to be able to get along with him; and I can't seem to be able to get along without him."

In the therapy, the patient was informed of the probable reasons for her fiance's actions. Much emphasis was laid upon the possibility that his action might be the result of his irritation at not being able to support her and that at the bottom there might be an intense loyalty. However, the possibility was also pointed out that both were young and that it was likely that neither knew what love was and what it involved. It was then suggested that for a period of six months they go out with others as often as possible. At the end of that time they would be in a better position to know their own feelings, and having tested them by being with others, if they decided on marriage then it should be consummated quickly. In any case, they should evaluate the pro's and con's of the situation as unemotionally as possible. A week later she wrote, in part: "After leaving your office, I was the light-hearted girl I hoped to be. . . . I didn't let my emotion get the best of me, and we face the situation sensibly. . . . I am out to conquer that funny thing called 'life,' not to let it conquer me."

In this instance, one interview was sufficient to set a fairly normal girl on the right path wherein her own common sense could then work out the solution. The therapy in this case was simple advice about how to deal with existing stress. Analysis of the general reaction patterns was not needed for a satisfactory recovery, since there was no indication of a basic instability.

Mrs. B. M., aged thirty-four years, complained of intense nausea, vomiting, insomnia, and great fatigue. Four years before she had tuberculosis and was in bed for a year. At the present time, she had no lung pathology but she was fearful not only of a recurrence but of many other illnesses.

She was the only daughter of maladjusted parents: a dominating mother and an aggressive-on-the-outside, but meek-at-home father. She grew up with marked feelings of inferiority, never relied on herself, was moody, and feared while she resented doing anything without first consulting her mother.

Her psychotherapy consisted of evaluating objectively why she had developed her emotional instability, of pointing out her dependence on her mother and her imitations of some of her mother's conduct. She was instructed to visit her mother less often, to engage in more of her own activi-

ties, to learn to make her own decisions, etc. At first, she "intellectually" understood what was said but was unable to make it part of her reaction pattern. With repeated reassurance and guidance in specific problems, she gradually made these tenets and others along the same line, automatic. Finally she was able to deal with her parents and with her own feelings of inadequacy without perturbation; but this condition came about only after a period of a year, with visits twice a week for the first six months, the number gradually decreasing until at the end she came only once a month.

DIRECT DISCUSSION

Direct discussion is probably the simplest and most efficacious means of obtaining the desired information. The technique consists of: (a) a spontaneous history given by the patient of the onset of the illness, and his background, and (b) a directed examination, with specific questions being put toward possible etiologic factors. In some instances, such direction is not possible, as the patient may go into involved discussions about some trivial fact that has little bearing on the symptoms or essential history. It is therefore desirable at the outset to inquire as to just what symptoms the patient has. It is important to record what the patient has to say in his early visits, for later one can refer to these early notes to determine the patient's progress. It is well to inquire "whether there are any other symptoms," or if any doubt exists, to ask, "Would you be perfectly well if you did not have these symptoms?" Such inquiry often brings forth many other complaints which were in the background, and which may throw light on the condition.

Having elicited the complaints, the physician can then evaluate the history in relation to them. It is necessary to determine the date of onset of these symptoms.¹ Here it is important to detect the patient's evasion. Many will reply, "It has been bad for the last six months," or "It really began to bother me some weeks ago." Such a vague onset should be investigated further, and it is then necessary to ask whether the patient was perfectly well prior to "six months ago." Usually one will receive some such answer as "I guess I have been nervous since I was thirteen," or "I've been nervous most of my life." The very beginnings of the illness are important, for in many instances the original stress or irritating factor made its impact at that time, and the patient's adjustment to it was never wholly satisfactory. Starting then as far back in the patient's history as it pertains to the onset of symptoms, the physician asks that subsequent events be described.

¹ *Vide* p. 268 ff.

It is often necessary to ask patients about their emotional and intellectual growth and changes as well as about the history of their physical complaints. In the first interview these discussions may be difficult, for the patient does not realize the value or importance of these emotional forces. Moreover, there tends to be a shyness which needs to be overcome; and as the physician develops a technique for putting patients at ease, he may greatly facilitate the production of the needed information. On the other hand, some patients will skip over even the bare outlines of their history and reiterate such complaints as "If only my heart would not beat so fast, I'd be well." With such patients, it is necessary to take firm hold of the examination and direct it along constructive channels.

The factor of time is important. As much time as possible (averaging one-half to one hour) should be allowed for each interview. Otherwise, the patient feels "rushed," and omits mentioning many details which he considers irrelevant, but which may provide important clues to his illness. The patient is given an appointment and by a casual phrase from the physician learns how long the interview will last. The patient should, as many do, not feel that he is "taking up" too much time and so curtail his information. On the other hand, patients who talk endlessly and to no purpose, are encouraged by a definite appointment to "cut short" their saga. If a patient is shy and timid, it is well to inform him that the hour is allotted to him and that no other patients will be seen during that time. It is unfortunate that the busy general practitioner often cannot spare so much time for each patient. This unfortunate time pressure can be compensated for only by increased ability to obtain information, increased insight into the patient's problems, and sufficient rapport¹ with the patient to get him to carry out at least the more fundamental rules of mental hygiene. The less serious psychoneurotic patients may obtain relief in these short-term sessions;² and although there may not be a cure, they may be stabilized sufficiently so that they can live more maturely, more efficiently, more happily.

There is a technique and art in interviewing patients. If this technique and art are properly exercised, the physician may not only facilitate the getting of information, but obtain material that was held back consciously or unconsciously. Thus, patients not infrequently remark, "I didn't intend to tell you this when I first came, because you'd think it was silly," or, as on one occasion during an analysis of a dream, the patient remarked, "I didn't

¹ *Vide* p. 134.

² *Vide* p. 260.

remember these parts of the dream; they just seemed to come out as I talked to you." The keynote of this technique is an obvious interest on the part of the physician in the patient's story. Human beings respond to interest in themselves more than to almost any other stimulus. Then too, it must be apparent to the patient that the physician listens to the story not to gratify his own curiosity, but in an objective, non-judging manner to determine what in the patient's reaction is unhealthful and needs correction. Psycho-neurotic patients so often have feelings of inferiority and self-condemnation that pietistic criticism¹ by others merely deepens the feelings of guilt instead of either removing them or finding their cause. Then too, the tone of voice, the expectant air, the facial expressions of the physician all tend to confirm or nullify his objectivity. Each physician needs to cultivate his own technique, learning by his mistakes and his successes.

On many occasions it is advisable to reassure the patient that what he says is held in strictest confidence, that no one will know of his problems or attitudes.² In keeping with this establishment of confidence it is best to ask the patient for permission to speak to the relative; and to the relative, even if he be a doting parent, it should be made clear, that what the patient has said was strictly in confidence and can not be divulged.

Since many symptoms are the psychologic expression of underlying emotional states, it is necessary to watch the patient closely for signs of emotion when certain topics are mentioned; for the feeling or idea behind that emotion may be one of the etiologic forces in the symptom. Thus, if a patient begins to cry while telling of a relatively innocuous experience, it is important to inquire into the reasons therefor. Crying is an obvious form of expressing internal conflict; scrutiny of the patient's expression often reveals a grimace, a frown, a tightened jaw, compressed lips, not congruous with the story being told. The patient, for example, may for no apparent reason pause unduly in his conversation. Here again, investigation may lead to valuable clues.

Mrs. T. H., aged forty-nine years, was brought to the sanitarium laboring under delusions of persecution, and having hallucinations characterized mainly by hearing voices of her children on the floor above pleading not to be killed. She was given several metrazol convulsions and her depressions and delusions seemed to clear up entirely. She was afraid of the treatment, however. While speaking with her about returning home, I asked whether the ideas she had about her children's being killed were gone. She smiled and received the suggestion as "foolish": but at that moment she heard a slight

¹ *Vide* p. 406.

² *Vide* p. 156.

noise in the room above her, and her face assumed a frightened look. A moment later her face was all smiles. Her momentary expression of fright meant one thing—her delusions had not entirely disappeared; and her children visiting her that evening confirmed this view. With three more treatments, however, she became perfectly well and remained so.

In the examination of the patient, there is no substitute for observation. Just as in clinical medicine the physician can often observe many signs which do not appear in the laboratory, so is it even more true in dealing with human personalities. There is something highly contradictory in the finding of a catatonic, mute, apparently emotion-less schizophrenic patient, with finger-nails bitten to the quick: such a patient is in a state of turmoil in spite of his apparent apathy. Or the patient lying in bed calmly and in a smooth, even voice discussing her illness, may express her underlying tension by the way she constantly picks at the bed clothes or by the ischemic whiteness showing at her knuckles because of her clenched fist. Many a person has trained himself to wear a mask over his voice as well as face; and it is this mask which may mislead the observer and cause him to state, "That person doesn't look like a neurotic to me."¹ However, it is often possible to observe tension on the part of the subject; for the total organism tends to be in harmony with the inner emotional state, except where conscious effort attempts to mask it; and even here some part of the organism manifests the lie of the mask.

A spontaneously related history told in the patient's own words will often yield much information which otherwise would be repressed. Consequently, the physician should use a minimum of questions and suggestions during the first interviews. The additional time needed for such spontaneous giving of a history is amply repaid, for the innuendos, shades of meaning, emotional tones may throw revealing light on the reason for certain actions, whereas concise answers to pointed questions may distort rather than clear up the facts.

However, after having heard the spontaneous story, the physician may supplement his information by direct questions on the more common problems which might have a perturbing effect on the patient. The financial status,² for example, often is of concern, and the extent to which it plays a role and the extent to which attitudes and desires play a role must be determined. Questions in regard to the marital state may reveal much pertinent information.³ The ideals of what a marriage partner should be

¹ *Vide* p. 248.

² *Vide* p. 170 ff.

³ *Vide* p. 164 ff.

like, the attitudes toward sex before and after marriage, the amount of responsibility, the mutuality of interests—all may be significant. Similarly, it is of value to inquire into the role of relatives, of children, of religion, of ambitions, and any other problems which may seem to have special significance.

In simpler cases, all this information may be irrelevant; or from the point of view of the average physician, unnecessary to obtain relief of the symptoms. Often the handling of some of the outstanding difficulties will remove the "stress," and the basic personality may adjust itself to its former state.¹ But to remove all bases for future breakdowns in the more severe psychoneuroses superficial information is insufficient. One may get results by scratching the surface soil, and the seeds of mental hygiene may grow with little cultivation; but intense cultivation, with plowing and preparing of the soil, hoeing and watering, weeding and care of the ensuing growth, is much more likely to produce the type of crop desired.

FREE ASSOCIATION

With many patients the physician comes to a point where no more information is obtainable by direct questioning. This deadlock occurs when the patient falls into a *rut of thinking*, or is emotionally blocked,² and can conceive of no other possible causes; or where the repressions are so strong that the patient cannot consciously bring the irritating emotions to the fore. One must then turn to the technique called *free association*. This method was first systematically utilized by Freud in getting information from neurotic patients. It is an excellent method of bringing to light many experiences which seem otherwise to be forgotten.

Our conscious thinking process is based on the principle of selection of associations. Our thinking is not made up of a sequence of words but of thought-pictures which we try to describe (usually inadequately) in words. These thought-pictures may be vague, shadowy, and indefinite, or they may be sharp and clearly-defined. They occur not in random fashion, but because of some associative attachment to the thought-picture which has preceded it or because of the advent of new stimuli; and this association may be tenuous or it may be strong; just as the new stimuli may be mild organ sensations or severe environmental disturbances. These

¹ *Vide* p. 159 (Case B. E.).

² Often persons cannot bring painful memories to consciousness. Such memories are said to be "emotionally blocked" and to exist in the unconscious.

ideas flit through consciousness much more quickly than they can be expressed, and any single thought-picture may bring up several associated ideas before one of them can be vocalized. Our training at thinking forces us, because of the exigencies of living, to select from these numerous concomitant ideas the ones which lead toward the goal-idea which we have originally selected. The man, for example, who has had an accident¹ and describes how it began, selects those thought pictures for description which eventually will end in a description of his trip to the hospital. This goal is the guiding force present before the beginning of a sentence and ordinarily dictates the choice of the fitting thought-pictures and the elimination of those which have little relation to the goal. This selection of a goal-idea is a cortical process and is facilitated by training and the needs of civilized life. The more one needs to think, even if only in school work, the better trained is the person to think, other things of course being equal. However, the working world is frequently far better than are our schools in teaching persons "how to think." The technique of thinking must not be confused with so-called "education." The cortex is really the "thinking" part of the brain, by which psychologic processes are mediated. Injury to the physical structure of the cortex as in senility, alcoholism, or toxic psychoses,² results in impairment of the function, and in "rambling" speech, because the power to select the correct thought processes, or to remember the goal-idea, is diminished. As a consequence, these patients talk endlessly without finishing their story, even forgetting the end. The same is true in manic attacks. On the other hand, in paranoid patients the thought process is disturbed so that certain associations are selected to the exclusion of all others—hence the old term "monomania." In "normal" thinking, the occurrence of several word images at the same time may lead to an occasional digression but usually leads to a goal. Furthermore, the selection of the particular thought image is a flexible process, as distinguished from the inflexibility of psychotic reasoning. Thoughts come so quickly that often we are conscious of only major parts, and miss the intervening reasoning process. When strong emotions exist within the person, however, there is a constant vacillation³ between the two poles of action present in the conflict. The deeper the conflict and the stronger the emotional tone the greater will be the vacillation. As a result, the organism does not progress in a stable fashion along its course but is markedly unstable. There is no feeling of

¹Cf. p. 147 (Case X. F.).

² Vide p. 355.

³ Vide p. 80.

certainly, of security, so long as the emotionally charged ideas are strong enough to irradiate their indecisiveness to all actions and thoughts. The strength of the emotionally-toned ideas is sufficient to cause emotionalism to protrude into almost every thought and to influence the direction of the thought.

Mr. S. D., aged forty-seven years, was diagnosed as having an anxiety depression. He had constant and severe headaches, was greatly fatigued, so much so indeed that he did not have strength to eat a full meal, and lost considerable weight. He slept sixteen hours of the day and awakened as tired as on going to sleep. The slightest effort exhausted him.

He was married at the age of thirty. He was deeply in love with his wife and she with him. They found most of their enjoyment in quiet pastimes and rarely sought the company of friends. Soon after marriage it was discovered that she had nephritis, and her systolic blood pressure was over 200. She became invalided, and he her slave. He begrudged himself the time to go to work and spent day and night tending to her. His grief over her suffering was great. He cried frequently and could not bear the "cruel way" nurses treated her. He made her bed, cooked her food, and flew into a terrific rage if he thought she wanted something which the nurse did not get quickly enough. He became thin, weak, unable to concentrate, and despondent. When after a prolonged period of uremic coma she died, the patient was beside himself with grief.

Everywhere he went, something reminded him of his wife. Jewelry brought tears to his eyes, houses shaped like the one he had lived in made him shudder, children playing on the street reminded him of the children he did not have, the sickness of one of his friends recalled "her" suffering, and the emotional outbreaks of some of his friends reminded him of the way he felt. When he spoke of her three years later, he sobbed like a child. He remained a chronic invalid until his attitudes toward his wife were reoriented.

Most of the thought processes of this man revolved about the emotional concern in his background. All ideas were in some way tinged by his primary concern. If this man were to talk at random, to "free associate," that is to speak of whatever came into his mind, he would constantly turn to the subject of his wife, even though he might have started talking about the structural factors of a modern bridge. His associations if released from conscious (and indeed habitual) control would inevitably drift to the topic of constant concern.

In many psychoneurotic patients, the concern is so painful that the patient dislikes thinking of it. The painful memory is pushed into the background and "repressed," although its emotional tone is still active.¹ To ask such a patient whether he is troubled often results in the reply, "Nothing troubles me—only my heart trouble

¹ *Vide* p. 68 ff.

(or other symptom)." The patient has refused to face the emotionally-toned conflict at the basis of his symptoms and even denies the existence of the conflict. Direct questioning may not elicit the causes; free association, however, is effective.

In free association, one trains the patient to let his thoughts associate freely without any conscious direction, while consciously making an effort to verbalize every thought that passes through one's "mind." No effort is to be made "to tell a story"; any interrupting thought is to be mentioned; one is to let one's thoughts wander. Often much training is necessary to teach the patient this technique.

The purpose of this free association is to permit all associative ideas (that do not flit by before they can be mentioned) to be brought to light. Where conflict or emotionally-toned ideas exist they will intrude themselves into some of the associations; and although they would usually be repressed,¹ under this technique they will be expressed. In such a way one may unearth many etiologic irritants which have been "dynamically forgotten."

In some patients, the repressed ideas are not far below the surface and may be easily elicited by this technique.

Mr. X. F., aged fifty-four years, complained of severe pains across his chest. They were intermittent in character but were severe. They were worse when he was sitting quietly and radiated across the whole chest, but had no focal point, or constancy. Physical examination was negative. X-ray of the chest and an E.K.G. were also without evidence of pathology. There were no complaints referable to the gastrointestinal tract. These pains had been present for three years.

He denied having any worry or concerns. He lived with a son, his wife and daughter being dead. He made a fair salary, played golf once a week, and denied any possible stress. "Only trouble is these pains in my chest."

He was asked to "free associate." The following is a condensation rather than a verbatim account of what he said. "I don't know what to say. I've had these pains now for three years. They're awful at times. I can't stand them. When I'm working hard I don't seem to notice them so much. The pains are as bad as those of my wife. She had cancer of the breast four years ago and it spread under her arm and pinched on some nerve. We had to keep giving her morphine. And did I have the tough luck. One after another my daughter got sick with pneumonia and passed out on me, and my son had a smash-up in a car and broke his ribs. He still has some sore spots over his chest."

This man had had an unusual and severe shock, or rather a series of shocks, all occurring just before the onset of his condition, and the suggestive effects of these emotionally-toned illnesses was one

¹ Cf. *Dream Analysis* p. 153 ff.

of the bases of his psychoneurotic illness. One can easily follow the trend of his ideas and the manner in which the idea of his pain soon associated and brought to light his wife's pains, his daughter's pains, and his son's pains. Yet consciously he could not see how these occurrences had any relation to his own illness, and so he did not think of them when he was asked to tell about his concerns or anxieties.

In most cases such clear evidence so quickly given is unusual. One will find that much of the conversation, or rather monologue, is not contributory to the problem. Moreover, only small bits of information may be obtained at any given time. The observer must train himself not only to watch for these subtle pieces of evidence, but to follow them up as clues and to investigate them by the method of direct questioning. Such investigation will have the tremendous advantage of dealing with evidence presented by the patient as it is instead of trying to get the patient to fit into some theoretical dogma. The general practitioner often does not have the time to search so systematically into the personality background and must then substitute his "impression" and "guess" for factual basis. Even so the physician who has the capacity really to understand human nature, may often obtain excellent results.¹

The following is an example of the free association taken from the history of a girl of twenty-three who suffered greatly from fears of being alone. She could advance no reason for her ideas and denied any other topic of concern.

"I've been terrible. I cry a lot—always have. I look at myself in the mirror and I'll be gosh darned if I know who I am—I try to convince myself that everything is all right and I can't—I don't know what to do—I have some silly answer for what I say—A silly idea came into my head that I should call my friends together and say good-bye—I know I'm going to die—then I think I won't recognize any of them. So many things running through my head—If I could only be sure that they are not insane thoughts—Sometimes I wonder if I'm just pretending, but I can't do anything about it. I've been receiving a lot of attention but I don't want it now. If I could die I'd be happy, yet I'm afraid of death. Don't tell me I'm not insane—I am. I'm conscious of everything. I'm conscious of being Miss L. L. Tell me what's wrong with me even if it won't do me any good. Boy, I'll bet you never had a patient like me. Wait, something is dawning on me—an idea—I had to choose between two fellows last Wednesday—I've been trying to stall them off—I don't know which one to choose—Both Al and Sam are nice boys. I go to the mirror and ask myself what is there to be afraid of—and I get no answer—I cause everyone I come in contact with to suffer—I

¹ *Vide* p. 133 *ff.*

can't visualize anything—It seems like a play and I can't visualize the audience. I'll never be able to do anything as long as I have this bowel trouble (a diagnosis of spastic colitis had been made). It always has worried me. I've had this trouble for five years, and I know I'll never be able to get married—I'll never be able to have sex relations."

This stream of speech was not continuous. There were pauses from time to time, and the patient would then be asked, "What are you thinking of now?" Most of what she has said is non-contributory, and the only fact of major importance brought out, just before the end of the interview was her fear that she would be prevented from marrying because she had somehow acquired the notion that "bowel trouble" interfered with sex relations. Throughout her speech, one can see the indecision, the fears, the lack of self-confidence, and the unreality of the world about her. It then became necessary to determine just what she had in mind about her spastic colitis, and just what role it played in her illness. On further discussion, it developed that her unhappy and neurotic aunt was divorced because she had "bowel trouble" which prevented normal conjugal relations. The patient "just knew" she too would be unable to live a normal life because she had the same trouble as her aunt. She had developed a neurosis which was in part an exaggeration of her aunt's complaints.

It had never occurred to the patient to mention these thoughts; she was much too concerned about her state of mind. Only when she let herself "ramble," and spoke whatever came to her, was it possible to get at the disturbing forces.

In teaching a patient to "free associate," one needs much patience. The patient will at first say, "It's silly," and "Nothing comes to me," or "My mind is a blank." One needs to reassure the patient that thoughts will come, that it is but a matter of training one's self to speak. It is better to have the patient recline on a couch, but he may be trained to free associate while sitting in a chair. As the patient lies quietly, it is often well to stimulate by asking, "What are you thinking of now?" Some patients will attempt to draw the physician into simple reassurances and not really progress in bringing forth information. With these patients it is necessary at times to state specifically that there will be no conversation for, say half-an-hour, and the patient must learn to continue speaking. Above all, it is necessary to have facts brought out by the subject before specific corrections can be made. What the patient may regard as inconsequential and unimportant may be the clues that lead to important causes, and this fact must be

impressed on him. This method has the marked disadvantage of requiring a great amount of time to obtain small bits of information: its advantages lie in the fact that it is a most reliable method of getting at deeply repressed experiences.

DREAMS

The analysis of dreams is another method of determining basic and hidden memories. Dreams are a function of the cerebral activity during sleep, but they are closely allied to daydreams. The basis of analysis is the principle that *dreams are thought processes occurring in a non-waking state*; it is our purpose here to give only a brief outline of the subject.

Dream ideas differ from waking ideas in several ways. Dream ideas occur while the activity of the brain is decreased, while there is relatively more anabolism than catabolism. As a result, the training and inhibitions¹ learned during conscious life are in relative abeyance, and the basic; *i. e.*, the more primitive methods of thinking² occur without the check or influence of "logical" and learned techniques. The amount of dreaming a person does, however, cannot be determined by what he remembers, for much of dream material is forgotten.

Fundamentally, dreams as well as waking thoughts are activated by emotional tone, by wishes and fears. In dreams, these desires and animosities are far more forcibly expressed than in waking states. In the dream, a wish becomes satisfied and intensified; so, for example, an animosity results in the complete destruction of the disliked one. The primitive method of reasoning by laws of similarity and association is in full operation during sleep; and ideas which have only a thread of similarity, or are only remotely associated to each other, may follow each other in sequence in a dream. The dream is primarily visual in nature, and the actions are associated with an unformulated but potent feeling tone.

As primitive thinking is unlogical, so is the dream. Relationships have no rational basis or sequence. The dreamer's emotional attitudes tend to appear in the dream according to their number and intensity. Thus, on analysis of a dream, one finds many different wishes or fears rather than one coherent pattern. Each dream is composed of many symbols, and consequently there are many wishes and fears represented, and the dreams appear to be jumbled. Those wishes or animosities which are deep-seated and

¹ *Vide* p. 46.

² *Vide* p. 49.

present for many years may repeat themselves frequently in the same or in various dreams. On the other hand, incidents of the day, trivial in themselves when viewed sometime later, may carry sufficient emotional tone to permit them to intrude themselves into the dream.

Rationalization¹ plays a role occasionally in the "logicality" that is present in a dream. This fact can be better understood if one refers to hypnosis situations. Actions which these patients have suggested to them are often rationalized. Thus, one young woman hypnotized before a group of students was told to wash her hands when she awakened. When the patient was awakened from the hypnosis, she paused, looked at her hands, and then said, "Excuse me please. My hands feel dirty. Can I wash them?", and saying this went to the sink to do so. This experiment can be repeated in many different ways. In other words, the action which was suggested and which the patient felt bound to carry out without knowing why had to be rationalized. Similarly in dreams, when the dream thoughts are consciously presented there is a tendency (by no means the dominating one) to confabulate² and rationalize in order to give the dream a connected sequence. This process is an unconscious one.

The *factors of the dream* may be discussed under three headings: (1) the cortical activity which permits dreams to be produced; (2) the contents, or the wishes, fears, and emotional elements which the dream represents; and (3) the form or symbolic expression of the dream. Cortical activity is greatly decreased during sleep, and if there is no stimulation of the brain there may be no activity to permit thought process. Cortical stimulation may be produced by physiologic disturbances such as is common in over-eating before bedtime (by disturbed cerebral circulation), or during menstrual periods; it may be toxic and present in conditions of bodily illness; it may be the result of physical stimulation during sleep; or it may come from the emotional tone and pressure associated with psychologic problems during the day. In other words, whatever stimulates the cortex increases the possibility of dreams. On hearing the alarm clock in the morning, a person may dream of being on top of a church with many people waving at him, and suddenly the church bell may increase in intensity, followed by a collapse of the entire steeple. The brain was stimulated by the

¹ Vide p. 76.

² Confabulation (making-up stories) is seen for example in the alcoholic dementia patient, who not remembering the past, will invent and believe some wild story about his actions during the period of amnesia. Confabulation is an unconscious process.

insistent ringing of the clock to produce a dream just before cortical activity was aroused into consciousness, although the content and form of the dream were colored by the dreamer's own attitudes and experience.

The *content of the dream*, or that which is dreamed about, is ordinarily determined by the existing "frame of mind." If the stimulus (that which increases the activity of the cortex) is external to the brain, that is, comes in from the outside, or even from the circulating blood, then those wishes and fears and attitudes already present will become formulated into dream thoughts. If the stimulus is internal in the sense that the actual wishes and fears are the disturbing element, then they act both to stimulate and to form the elements of the dream. One might say that dreaming is thinking during sleep—primitive and emotional thinking, but still thinking. As a consequence, the dream is composed of those elements involved in the strivings of the individual, and the intensity of their expression is proportionate to the intensity of underlying desires. They may be incidents long past, the memories of which are continuous, or they may be emotionally-toned incidents of the preceding few hours. It is this content which we try to get at in analysis.

The *form of the dream* is dependent upon the manner in which symbols are used to express an entire concept and emotional attitude. The dream symbol is arrived at in the usual primitive manner; that is, some idea vaguely or partially associated with the existing wishes or fears acts as a condensed¹ symbol. Since each person has a host of wishes at the same time, his symbols are "lumped" together, and the dream appears as a senseless combination. However, the dream may form a pattern when each symbol is influenced to some extent by the preceding symbol, and when the main set of wishes is symbolized in various forms. The pattern which runs through the dream is conditioned in this way and later by rationalization and confabulation. The form the dream takes is thus a variable phenomenon and is significant not in itself but in what it represents.

It can be understood, therefore, that the symbols which appear in the dream have meaning only to the subject, for the associations which are formed are individual. However, there are some associations which are more or less common simply because most persons are subject to similar stimuli in social life, and these may result occasionally in symbols in dreams which have the same meaning.

¹ Vide p. 50.

In general though, even here there are individual connotations. Thus, a girl dreaming of being pursued by animals is commonly dreaming (wishing or fearing) of sex relations. This association occurs so often in analysis of dreams that it is possible to make such a relationship. However, it must be emphasized that such general meanings are uncommon.

Sex expressions are common in the content of the dreams, though the form in which they are expressed disguises these ideas. Sex symbolism in dreams is so common in civilized communities because of the necessity of curbing sex expression during conscious life. Moreover, in many persons there is an overly-intense inhibition of these sex drives, and the emotional tones about them find expression in dreams. Again, since sex drives are one of the fundamental orientations of the subject, they are bound to be expressed in some form or other. The presence of sex in dreams, however, does not mean that it is the all-important element in the particular person's life; it may be only one small aspect of it. To trace sex desires from every dream is to over-emphasize what is present in various intensities in all persons. In situations wherein the person's life is imperiled, then the dreams are primarily concerned with his existence. Yet one might conceivably by primitive association on the part of analyst or patient find some sex drives even in such a dream which would be present without any real significance as to what is disturbing that person. When sex is said to be at the bases of all dreams, it may be because of the personal bias of the analyst who finds what he seeks; or because the subject is analyzed in an atmosphere where sex ideas are prevalent and consequently he dreams what he is expected to dream and "free associates" with this connection always before him.

TECHNIQUE OF ANALYSIS OF DREAMS

First of all, it should be stated that the purpose of dream analysis is identical with that of free association: to find clues which may be followed by direct discussion with the patient. Consequently, one should not hope to find too much.

Secondly, since dreams represent groups of many wishes, each dream symbol should be isolated and its particular significance terminated. Any portion of the dream may or may not be correlated with the whole dream.

It is then necessary to have the subject "free associate" to each one of the dream symbols. This associative process often leads

back to the main content behind the dream, almost in the same fashion as the particular symbol came to represent the dream. However, the thread that leads out of the content to form the dream symbol is often only one of the threads which connect the two, and it is hoped in free association to find that thread (association). Here, more than in ordinary free association, there is a great deal of repression, and the threads of association leading back to the original content may not be found.

By this technique, one can often arrive at the meaning of the dream, and the real significance in this laborious procedure lies in having the subject discuss the meaning brought forth. For example, a young woman brought in the following dream:

"I was walking in party clothes through a gaily decorated village. There were lots of small bears climbing around me and they were very annoying; but I didn't pay much attention to them. Suddenly a large bear rushed out and began to attack me, to tear off my clothes, and it frightened me so much that I woke up screaming."

To the thought-picture "walking through a gaily decorated village in party clothes," she replied in essence as follows: "It was all decorated up as if for a party. I often go out to parties and they're lots of fun." To the phrase, "many small bears annoying you," she replied, "There were five or six of them scratching and tearing my stockings, but I didn't seem to mind them. They're just like a lot of fellows I know, just pestering around. They go out with you, and you are cute, but after while they get on your nerves." To the phrase, "a large bear began to attack you" she could find no association at first. She repeated the phrase several times, and insisted, "No other ideas come to my mind." Finally, she broke out with the statement, "Jack is just like that. He's the fellow I'm engaged to. He's always trying to get me to sleep with him, and I have to fight him off."

The various ideas playing a role in the above dream are clear. The disturbing emotion present in the girl was the conflict between the desires aroused and urged by her friend Jack, and her moral scruples. The great concern she had over that problem and an indication of the relative strength of both elements was revealed by the fact that the fear was so great as to awaken her. Moreover, this clue led to the discovery that there was great conflict within the patient about her affection for Jack in other aspects than sex. (As proof of this lack of affection is the fact that to this present time five years after the dream, she has refused to marry Jack.)

Such a simple dream is not common. It is more difficult to understand the following. Mrs. K., a childless woman of forty-nine, told this to her husband:

"I dreamed that I had a baby, and you said you didn't like her because she spread her feet apart in peasant fashion. The baby said, 'I'll shoot you'; and small golden feathers began to shoot from her eyebrows. Instead of hurting you, they formed a halo about your head; and you said 'I'm God, and they can't hurt me.'"

On analysis, it was revealed that the woman had always yearned for a child—hence, the desire expressed in the dream. The morning before the dream her husband had told her of a woman on the street-car who, on sitting down, looked most awkward, because she had spread her feet in peasant fashion—the picture apparently had remained vividly enough in her mind to show itself in the dream. Mrs. K. had the day before seen a friend's little daughter who had the "cutest golden eyebrows"—and this experience too manifested itself. Finally, her husband had often jokingly insisted that he could never do wrong because he "was as infallible as God," and this memory too came out. It was easily apparent that this woman's dream was a conglomeration of many wishes and incidents. Some schools of thought might insist that this dream could be analyzed more deeply as to its meaning and would eventually lead to the Oedipus situation;¹ but such analysis would then resolve itself into analysis of any "emotional thought"² and in that instance "all roads lead to Rome."

JUNG'S ASSOCIATION TEST

Still another but more cumbersome method of getting at these repressed and unexpressed memories is the written association test as devised by Jung. This test consists of some fifty to one hundred words, most of which are of no special significance, and intermingled with which is a list of words which the physician feels may represent a special role in the patient's life, but which the patient is unable "consciously" to remember. The patient is asked to give the first word that enters his mind the moment he hears the test word. The type of answer, and the time taken to respond, are noted, and if the patient is "blocked" and cannot think of a word quickly, or if the response is peculiar, then all

¹ *Vide* Appendix I.

² All "emotional thoughts" are traceable to fundamental wishes, and all these wishes and fears are so interrelated that if one traces back far enough one can always find sex.

associations connected with that word should be investigated. Thus, if he responds "devil" to the stimulus word, "wife," or cannot think of a word on hearing the word "poverty," he leaves the physician with significant clues.

HYPNOCATHARSIS¹

Hypnecatharsis is another method of obtaining these unconscious experiences. Essentially, this method consists of hypnotizing the patient and having the patient free associate while in this state. Often memories will flow more easily under such circumstances. The difficulties, however, lie in the facts that all patients are not hypnotizable and that hypnosis casts a shroud of mystery about the process, making a "mystic" affair of that which one desires the patient to be very clear about. The same difficulty applies to the therapeutic side of hypnosis.

INFORMATION FROM RELATIVES²

Finally, it is often of value to discuss the patient's problem with a near relative. Two important points must be remembered. First, the patient must have full knowledge of the consultation so that he cannot feel that he is being conspired against; and, secondly, the physician should not divulge to anyone, not even the parents, the personal "secrets" of the patient.³ This silence is important, for once the relatives know of the several forces behind the patient's actions, they often are unable to suppress their knowledge, and the patient becomes resentful and guarded in what he says later.

¹ *Vide* p. 230 ff.

² *Vide* p. 344.

³ *Vide* p. 142.

CHAPTER VIII

STRESS AS A DETERMINING FACTOR

TO TREAT the psychoneuroses it is necessary to deal with both: (1) the stress or precipitating factor, and (2) the personality attitudes¹ (constitutional orientation) toward past, present, and future stress. The technique of determining these factors; *i. e.*, stress and attitudes, was given in Chapter VII. The next step, resynthesis of the personality, involves both factors; and though they are interrelated and mutually determining, they need separate discussion.

It is impossible categorically to state what constitutes stress, inasmuch as stress is a relative and not an absolute term. Its effect on the patient is the result not only of its intrinsic nature but also of the patient's attitude toward it.² What is a heavy load for one may be light for another; what is a luxurious life for one may be abject poverty for another. Some persons adjust themselves to situations which to the spectator seem unbearable; while others break under what appears to the outsider to be a relatively slight pressure.

One very wealthy man was approached for a contribution to a charity agency. He had always given freely; and although the depression of 1932 had affected him, as it did others, he still was considerably better off than most. He refused the request point blank. He was intensely worried about the future. He spoke as if ruin were not far off. "How can you even think of asking me for a contribution?" he stormed. "My income dropped from five million last year to one million this year."

Contrast this situation with that of the young man of 22.

John had been in love with Sally for a number of years. They had made repeated plans for marriage but were prevented because neither of them could find work. His wet palms, dilated pupils, tachycardia, and other symptoms of anxiety were directly traceable to this apparently unsolvable condition. Yet one day, he rushed into the office with gleaming eyes, and bubbling with joy. He had finally landed "a steady job" on W.P.A. and was going to get married.

The wealthy man was under stress only because of his own attitude; John, however, considered that stress was removed when he procured a precarious position. The difference in what each man "felt" lay not in the actual stress but what each considered stress.

¹ *Vide* p. 126.

² *Vide* p. 125.

To say that there are only two categories of stress in which the role of attitude is relatively slight; namely, actual physical want and physical handicaps such as illness, deformity, and restraint does not simplify the problem, inasmuch as stress is no less real and devastating in its effects because it has its origins in attitudes rather than in actual situations.

The complexity of modern civilization has greatly multiplied both the demands put upon man, and also the number of directions in which stress may be felt. The primitive conception of security and satisfaction, measured in terms of sufficient protection and food to maintain existence, plus gratification of the sexual desires, has been so greatly expanded that instead of being the primary object of life, it is for the vast majority rather "taken for granted," so that man spends relatively little of his energy in the pursuit of material food to satisfy his immediate appetite. He seeks, in addition, security (food) for the future, recognition, luxuries, response, status, self-expression, etc. Each one of these words is a generic word with an infinite variety of specific meanings and connotations.

In general, it may be said that stress produces tension in proportion to the person's attitude toward it; that is, stress tends to be as bad as he feels it to be. Moreover, if the attitude toward actual physical stress is met with objective determination, then the detrimental effects will be primarily physical and not emotionally disturbing.

Therapy may follow one of two lines: (1) removal of the stress, or the patient from the situation wherein stress exists or (2) reorientation of the patient's attitude so that much of the emotional force involved will thus be removed, and the patient may then be trained to bear the stress with little difficulty.¹ The latter method is not only more practical and feasible but also more universally necessary, because as in most instances among the psychoneuroses, there is a definite lack of ability to bear stress which is normally borne by others.² Chapter IX will deal with the treatment of the attitudes; and if the physician will keep in mind that stress and attitudes are inextricably bound together, it will be possible in this chapter to deal with the first method of therapy, that of "removal of the stress, or of the patient from the situation wherein stress exists."

If one meets with patients suffering from malnutrition, as the

¹ Provided of course that there is no actual existing physical illness or need.

² *Vide* p. 208 ff.

result of a lack of money, and at the same time suffering from a neurosis, there is no other treatment so effective as the provision of food and the relative assurance of food in the future. If a mother manifests emotional instability because her husband cannot earn enough to provide food and clothes for the children, one can do much to remove the emotional instability by supplementing the family income. If a man develops anxiety attacks, and one finds that he is concerned over his inability to secure adequate funds to care for his tubercular child, psychotherapy is only a sop which may be as false as are the delusions of grandeur in the general parietic. The purpose of psychotherapy is not to relieve empty stomachs by filling the mind, nor is it common sense to try to do so. The purpose of psychotherapy is rather to train men to face their problems objectively and courageously, and not to deceive themselves by the use of various psychologic mechanisms.

Consequently, in the clinics and elsewhere, it is important to ascertain just what the financial status of the patient is; and if there is actual want (and such *need* must be differentiated from *artificial desires*), financial help will be the best psychotherapeutic procedure.

Mrs. B. E., aged thirty-seven years, came to the clinic complaining of marked fatigue. She had headaches, various neuromuscular pains, and had lost much weight. The first tentative diagnosis was that of Addison's disease, but this was ruled out and the diagnosis of neurasthenia substituted. Her early life revealed a distinctly unhappy childhood based on a decided lack of harmony between the parents.

It was quickly learned, however, that this patient, the mother of four, was living on reduced relief allowance. She was unable to feed her children properly, and rather than eat herself, gave most of her food to the children. In addition to this lack of nutrition, she had to take care of her home, do all the washing, and make clothes over and over.

A social worker was able to arrange for a better food allowance. The weakness and fatigue cleared up after a few days' rest in the hospital, on a high caloric diet. There were no symptoms of neurosis left after she heard of the arrangements made by the social worker.

It need hardly be said that in physical ailments the removal of the causative factor is of primary importance.¹ In cases of general paresis, for example, the etiology of the illness is syphilis, although the symptoms may be manic-depressive, schizophrenic,² psychoneurotic, etc.; and accordingly, despite the personality reaction pattern, all treatment must be primarily directed toward the cure of the syphilis. Disturbing physical ailments in chronic form may

¹ *Vide* p. 131.

² *Cf.* Ch. XVII.

often constitute a stress sufficient to cause a neurosis. Strabismus frequently leads to feelings of inferiority; a long-hooked nose may make one overly-self-conscious; a hare-lip, a large mole, a deformed limb, etc., all may lead to emotional disturbance. Modern surgical techniques, and cosmetic aids produce not only a remarkable change in the appearance but in the personality. Whenever possible this procedure should be encouraged.

Miss O. N., aged twenty-three years, was shy, avoided people, and was termed unsociable and introvert by her friends. She was unhappy, cried a good deal, and became very irritable. She admitted having an intense feeling of inferiority, which she said was at the bottom of all her actions. The reason for the inferiority was a marked internal strabismus of the left eye. An operation was arranged for, and the shortening of the external rectus gave her a normal appearance, even though vision was poor in the left eye. The entire personality of the girl underwent a metamorphosis. She became sociable, gay, and as she expressed it, "I can now look anyone in the eye and not be ashamed."

Mr. K. L., aged thirty-four years, was an active and aggressive business man. He was, however, known as a restless and irritable person. He was full of energy, but snapped and fought with almost everyone who came his way. He could not keep stenographic help because of his constant fault-finding and criticism of the way in which the work was done, even when apparently the mistakes were his own.

He complained of pain in the pit of the stomach, especially after eating. He had to avoid highly seasoned foods. He took baking soda after every meal. In the middle of the night he would awaken with pain, and after meals he was excessively irritated. A medical examination revealed a definite peptic ulcer, and when this was adequately treated, much of his emotional difficulty was removed.

It has become increasingly well-known that an essential part of the cure for peptic ulcer¹ is teaching the patient how to relax, how to live more calmly; but it is equally true that such treatment is futile unless the physiologic pathology is also cared for.

Just as psychoneurotic symptoms may disappear with the removal of stress; *e. g.*, treating the parents of a spoiled child or removing a strabismus so also may the same results be achieved if the patient is removed from the situation in which stress exists.

Mrs. N. H., aged twenty-nine years, was a nurse companion of an elderly and irritable woman. She had to be in constant attendance; and while the work was not physically difficult, she was confined to the house except for a short period in the afternoon when very slowly her employer took an "afternoon constitutional." Mrs. N. H. acted in this capacity for six months, having only an occasional afternoon off, which did not afford her much

¹ *Vide* p. 306.

pleasure, inasmuch as her work was far removed from her friends. Mrs. N. H. became irritable, short-tempered, and developed dizzy headaches. She felt obliged to continue in the employ of this woman, because the work was easy and the salary better than she could otherwise make. Moreover, she was the sole support of an aged mother. Her symptoms became worse, but disappeared almost immediately when she resigned her position and procured another which, while it paid less, was in the city and near her friends.

Mrs. L. S., aged twenty-six years, had many symptoms of anxiety. She would awaken with a pounding heart, couldn't catch her breath, and was constantly oppressed by the fear of death. She had married some years ago while at a party. A young man with whom she had gone to several parties was constantly proposing to her and she was constantly rejecting him. At one party three years earlier, she became slightly intoxicated, and the man persuaded her to "elope." She consented, and awoke from her alcoholic state to find herself married. Her anger and resentment were great, but she continued to live with him. He, sensing her lack of affection, became increasingly jealous. He began to accuse her of liking her family more than him; of being antagonistic. He flew into violent rages at her, but at the same time refused to grant her request for divorce. Her own family was on relief, and she felt she could not return to them and be a burden. She felt "trapped," and developed the anxiety symptoms described. She hated and feared her husband.

Finally, she decided to separate, regardless of the consequences. She saw a lawyer and arranged for a divorce. She persisted in her suit, in spite of the fact that her husband first threatened suicide and then held a loaded revolver against her side in an effort to change her. She secured the divorce, went to live with her mother, and after a few weeks procured a position. Her symptoms disappeared soon thereafter.

In this situation, the patient removed the stress from her life. This removal was almost essential for a cure. The impossibility of sharply distinguishing, however, between treatment of stress by its removal and the reorientation of the patient toward it becomes vivid when one realizes that often the only way to remove the stress is by changing the attitudes of those persons who constitute the precipitating factor or stress to the patient. In childhood, for example, the emotional tone in the environment and the insistence on certain types of behavior may operate to force the child into a neurotic illness which is called "a behavior problem." Therapy in these instances is directed toward the parental behavior which constitutes the precipitating and determining factor. In many of these young children, discussion with them is relatively unimportant, while a change of parental behavior is essential. The parents must learn that the child will behave and react unstably in proportion to the instability of the parents. The child will be what the parents are. External calm is insufficient; for the child

will sense the underlying emotional tone, regardless of the passive mask which may be worn. The atmosphere of tension is the most irritating of all atmospheres and permeates widely. Indeed, neurosis is one of the most contagious diseases known to man.

Mrs. M. P. was suffering from multiple sclerosis. It was incipient and manifested itself primarily by her "knees suddenly giving way" under her. There were no physical pains or disturbances. The positive Babinski was the only organic sign that could be found. The patient, however, was quite unstable. She had emotional outbursts and felt incapacitated because of her walking difficulty. She was afraid to go anywhere, and worried constantly about her "diagnosis" and the paralysis and helplessness that so often occur. She cried frequently, was nagging and demanding, slept poorly, and gave up such interests as playing the piano and memberships in bridge clubs. These symptoms were the result not of her multiple sclerosis but of her personality reaction to the *idea* of her illness and incapacity.

Her five year old daughter was a great problem. The child did not obey, was always into mischief, cried at not getting her own way, fought with her playmates, was finicky about food, was restless in bed, and in her sleep "ground her teeth."

The entire situation was discussed with the patient. Her attitudes toward her illness were revised. This change was accomplished by discussing with her just what happens in multiple sclerosis, with an emphasis on the fact that remissions may occur frequently and may last twenty to thirty years. The absence of pain and discomfort was a boon not to be treated lightly. Paralysis and death might come, but to anticipate them was not only valueless but harmful. Death is inevitable, and yet one does not ordinarily go about feeling concerned. It is important to postpone thinking about the future. She was urged, when symptoms occurred, to see a physician immediately and to abide by his treatment; but once having placed herself in his care she should deliberately and consciously turn her thoughts to something else. Moreover, she was persuaded that while she did live she had to learn to live as happily as possible; that existence with constant foreboding is illogical and impractical as well as depressing. She could still do many things. She could play the piano, engage in the activities of her bridge club, attend theatres, etc. She could learn to occupy herself with these things and not anticipate a dark future which in some cases is not dark. She was told that these attitudes can not be acquired by merely wishing or by intellectually assenting, but only if one consistently and persistently "practices" these attitudes.

The patient was seen twice a week for two months, and once a week for another month. Under the constant urging and with the constant encouragement of the physician she adopted the attitudes suggested above. She developed the attitude, "So what of it?" and this without bitterness. Most of her neurotic traits disappeared.

At the end of the second month she reported that her child had spontaneously changed and was becoming more likeable. "Margery minds me now and doesn't seem to fight so much." Practically the entire behavior problem of the child cleared up, seemingly without any effort on the part of the mother.

This patient was laboring under the stress of a physical disease. She had reacted to it with an emotional outburst which had become chronic and was on the way to becoming a permanent part of her personality. By changing her attitudes toward this illness and its possible future she was able to be more relaxed and tolerant of her difficulties and to enjoy herself. This change was accomplished by constant direction from the physician and persistent self-training by the patient.

At the same time, the child was suffering from the stress of her mother's irritability, and her behavior was the result of her mother's tension. When the mother's emotional strife was removed the stress was relieved and the child's behavior changed accordingly. Whenever a child is brought for therapy of his behavior, the physician usually needs to call in the stress (mother) and deal with it in order to "cure" the child.

Children who are somewhat retarded mentally are even less immune from environmental stress. The stress comes in the form of excessive (for them) demands from the parents and school.

N. L., aged six and a half years, "did not have neuromuscular co-ordination," according to the teacher, sulked a lot, did not study as she should, played pranks, and was a disturbing influence in the classroom. The mother tried to persuade her to study; but she refused, sulked, and had temper tantrums.

A Binet-Simon intelligence test showed the child to have a mental age of only five years, probably the result of a measles encephalitis at the age of three. She could not do those problems done by the usual six and a half year old. Further questioning revealed that she never played with children of her own age but always associated with those four and a half to five and a half years of age. Otherwise she was a normal, healthy, even jovial youngster.

This child had the body of a six and a half and the mind of a five year old child, yet she was expected to do the "mental" work of others her own physical age. She was entirely incapable of so doing. However, under pressure from those who accused her of laziness, and expected more of her than she *could* do, she developed defensive behavior which was called a "behavior problem." Discussion with her parents and teacher, and informing them of the child's ability, reduced the demands made on her, and her problem disappeared.

In this situation, the stress which precipitated the child's problem was dependent on intellectual deficiency and could be alleviated by discussion with the persons involved. The same is often true in situations involving adults; discussion with interested relatives and associates may go a long way toward removing the stress.

Removal of stress of persons suffering from senility or brain injury is also made possible by consultation with relatives. In many instances, actual psychotic reactions may be cleared up if the proper steps are employed. The keynote of therapy is adjusting the environmental demands so that a minimum requirement is made upon the patient.

Mr. L. M., aged fifty-six years, was well thought of in his community. He was an usher in his church, and had a small but successful business. A year before admission to the psychopathic hospital he was involved in an accident wherein he was thrown through the windshield of the automobile, and suffered from a basal skull fracture. When he left the hospital, a decided change in his behavior was noted. He became slovenly in his appearance, was irritable, his memory was impaired, he began to swear and curse, ceased attending church altogether, demanded frequent sex relations with his wife, and soon began to have hallucinations and delusions, accusing his wife of going out with another man, and insisting that the children were putting poison into his food. He finally had to be brought to the psychopathic ward. Investigation revealed that the patient had always been regarded as the head of the family, and respect and consideration had always been his. Following the accident and the failing memory, his actions and words were so childish that he was disregarded. His appetite was uncontrolled; and failure to gain attention from his wife and children angered him. His reasoning ability was too impaired to permit him to vent this anger effectively, and the result was a general irritability which ended in "mean" accusations against his family.

The family were greatly distressed and promised to cooperate. They were told that the patient could not be expected to act as a man of fifty-seven normally does, because his brain cells were too damaged. They must deal with him with much consideration. His children thereafter consulted him frequently on minor matters, asked his advice, listened when he spoke, and did whatever they could to make him feel "important." The wife took him for long walks, and she too listened "with attention" to what he said. The patient was told that sex relations could occur on only two nights a week; and his wife, having been presented with a definite plan, consented. As a matter of fact, being able to have sex relations and being able to secure assent for definite periods tended actually to result in diminished sex drive. The patient changed greatly, as far as behavior was concerned. He became agreeable, quiet, and seemed content. His failing memory did not improve, but his amenability to suggestion did result in vastly improved personality reaction.

In this case, the stress of trying to live up to his former self so that he could obtain the desired respect and solicitude was too great for him. It should always be remembered that the ego, no matter how low the intelligence may be, demands satisfaction and recognizes lack of attention and lack of ability to accomplish what is expected. Such stress may be altered by changing the attitude of the relatives.

In many patients suffering from senility the same factors hold true. Dealing with the relatives in a way similar to that described above often releases the tension. Where the situation is such as to prevent adequate cooperation, then removal to a rest home frequently clears up markedly abnormal behavior.¹ Senile persons often will be happy and content at a rest home where the routine of life is not demanding and where the environment does not expect of them greater cooperation than they can give. In other words, the existing stress is thus removed and they can adjust on the lower level which their injured brain permits.

Matrimonial stress is often a major factor in the production of the neuroses.

In a recent survey in the psychiatric clinic of the University of Illinois, I found that more patients complained of matrimonial disturbance than of financial difficulty, this condition being true in spite of the fact that patients are admitted to the clinic only if they are unable to afford a private physician. Matrimonial difficulties, however, are based on many different factors, including financial deprivation, and only a few can be relieved by dealing with environmental forces alone.² Those forces which involve a change in attitudes will be discussed more fully in the next chapter, but it must be remembered that here as well as in any other human reaction, the stress and the attitude are inseparable; and in practice must be dealt with together.

As has been discussed elsewhere,³ marital difficulties may be based on general early attitudes toward the opposite sex; selfishness and habits of petulance and wishing to have one's own way; standards for a mate set up by one's parents or other admired persons; temperamental and philosophical differences; differences in cultural background; sexual maladjustment; financial stress; interference by relatives; etc. In many instances, the stress implicit in these differences may be relieved by discussion with the husband and wife, if both persons are willing. An analysis of the factors involved, with an explanation of them, and urging that allowances be made are also helpful. There are many persons who really do care for each other but who will persist in being irritable if they do not receive certain attentions. While the patient is trying to change his attitudes, the simultaneous adoption of these desired attitudes by the mate will often facilitate harmony. Often this attempt to deal with such stress directly resolves itself into dealing with the attitudes of the mate. Nevertheless, with intelli-

¹ *Vide* p. 280.

² *Vide* p. 170 (Case S. O.).

³ *Vide* p. 105 ff.

gent persons who care for each other and wish to cooperate, much can be accomplished by a few discussions.¹

Mr. B. K. worked hard at his manufacturing plant. Its operations involved much concentration and energy. He frequently worked late into the evening arranging, calculating, planning. When he returned home he was tired, disturbed because of the infinite number of irritating details at work, and desirous of sympathy and attention. He wanted to be pleased instead of irritated, and he wanted an appreciation for his efforts.

His wife, a few years younger, was absorbed in her household duties. She cooked, planned good meals, and kept an excellent home. She helped her married daughter and married son take care of their children and even busied herself with visiting and helping some of his relatives. She was occupied all day with these minor tasks; and shopping for clothes, for food, for gifts represented the expenditure of much energy. She desired appreciation and admiration from her husband. When he returned home she dressed well and waited to be complimented and made love to.

The result was to be expected. He sulked because of lack of attention for his hard work, and she felt hurt because she wasn't admired; each wanted attention and sympathy from the other. The resentment grew apace, and finally he would leave the house in anger, and she would refuse to prepare the meals he liked.

In this case, discussion with each of the partners was remedial. The reasons for the other's actions were explained. Since each professed much affection for the other, this affection was constantly emphasized in the discussion. Each was urged to give the other the attention desired; and since doing so required just a little more consideration, the tension was relieved. However, it was necessary for the physician to see these persons several times, for minor incidents came up and threatened to start the conflagration all over. Under the constant urging of the physician, these situations were faced and surmounted with little friction.

The stress which results from maladjustments of sex relations, similarly, may often be removed by discussion frank and specific. The causes of sexual difficulty must first be determined² and then the difficulty removed where possible. Here again, though much of the stress is dependent upon the attitudes involved, talking to the mate often is productive of good results.

Thus, for example, the male often approaches the woman sexually without adequate preparation,³ and advice on this subject is helpful. The husband may need to be advised to pet and caress for some time before actually beginning coitus, in order to bring his wife to the same state of excitement that he is in. To many women even this technique is insufficient.

¹ *Vide* p. 131.

² *Vide* Ch. VI.

³ *Vide* p. 112 (Case T. V.).

"I haven't ever had an orgasm, even though I'm married for five years. I want sex relations, and my husband pets me, but he never says anything to me. I tell him to make love to me, to say nice things and to be romantic, but he says there is nothing to say."

Discussion with the husband was very helpful. He loved his wife, and learned easily to make his affection articulate. Usually if cooperation exists, the difficulties can be overcome.

In those maladjustments resulting from primary disturbances in sex tempo and not dependent upon the attitudes and personality troubles of the partners, the use of proper contraceptives is of help. Many men have orgasms quickly because of the extreme stimulability of the penis, and thus leave their wives in a state of tension and frustration which may begin a chain of domestic disharmony. In such instances, the use of a condom may decrease the stimulability without interfering with the male satisfaction, and thus permits a longer period of time for female orgasm to occur. In other situations, the use of a condom is irritating to both persons, and if contraceptive measures are desired, a pessary and spermato-lytic jelly are advocated. Contraception by the method of withdrawal of the penis before ejaculation is decidedly unsatisfactory, for not only is the possibility of conception great, but the orgasm is interfered with in both the male and female, and the attendant fear of conception acts both as an irritant and to produce tension.

The fear of pregnancy¹ often leads to difficulties, for not only does the woman fail to obtain her orgasm, but the male, missing the excitability of the mate and sensing her anxiety, may have ejaculation, but be dissatisfied because of the lack of response. Advice on how to use contraceptive methods, even if it be only the "free period" technique will make for much greater matrimonial happiness. Such instructions to the husband and wife relieve the psychological tension regarding the matter also.

Mrs. H. I., aged fifty-four years, had had three children before she was twenty-one, within three years after her marriage. She had difficult labor each time and feared conception thereafter.

Her husband came for advice one day. He was sixty-one, seven years older than she. For some weeks his wife had been acting queerly. She quarrelled with him frequently, and one day said that some one had telephoned and told her to watch out for her husband. He promptly had a watch put on his phone service by the telephone company so that each incoming call was checked. Several days later his wife flew into a great rage when he came home; some one had called, she said, to tell her that her husband was going out with another woman. He called the telephone company

¹ *Vide* p. 112 (Cases D. I., and I. C.).

only to be told that no one had made a call to his home at the hour his wife had mentioned. This accusation was repeated several times and could not be verified by the telephone company. The delusional character of her accusations became more apparent when she said one day that she had seen him across the street from their home walking with a colored woman who was wearing a big red hat. The wife became more and more depressed, and finally was found in the kitchen with the gas jets turned on. She was revived, but still insisted on accusing her husband of infidelity.

He told of the fears she had of pregnancy. All through their subsequent life (from the first pregnancy to the present) she had avoided sex contact as much as possible. The menopause came at forty-five, and when she was completely over it, she remarked that now they could have sex contact without fear. Mr. H. I., however, was approaching his declining years and unable to have sex contact very often. At the time of the interview, he stated that once a month was the limit of his capacity. At first his wife tried all manner of means of arousing him, and felt frustrated constantly. She began to accuse him of being too much with other women and so unable to satisfy her. These accusations hardened and crystallized into the delusions expressed above.

The stress which precipitated this woman's illness was the strong sex desire which was not satisfied. All her pent-up desires which were restrained by the fear of pregnancy were released after the menopause, but could not be satisfied. She refused to face the fact of her desire, and her interests were too circumscribed; it became necessary to make her aware of the psychologic basis for her delusions, and teach her how to meet reality more concretely and practically. Her husband arranged to spend most of the day and night with her so as to create a greater sense of security. In addition, he became more attentive and pursued a continuous round of pleasure trips, parties, sight-seeing, and the like with her. In the third place, she was brought to the psychiatrist, on the pretext of a neurologic examination, and was told after she was persuaded to tell of her life history and desires, that her strong sex desires were normal, but needed to be: (a) restrained to satisfaction at only monthly intervals, and (b) sublimated by her taking part in other interests.¹ Under this guidance, she was entirely cured of her delusional symptoms. The stress of her desires which produced her illness was relieved by increased attention from her husband, by new diverting interests, and by understanding and changing her attitude toward her desires.

In many patients there is an awareness of the sex difficulty but a lack of knowledge of what to do about it. As one husband remarked, "We have been told many times to have 'normal sex

¹ *Vide* p. 253.

relations,' but this is the first time anyone has discussed specifically and in detail what procedure we should use in this case." His wife had dyspareunia, and he and his wife were instructed to avoid actual coitus for several weeks, although he should massage and dilate the vaginal orifice nightly, first inserting one finger, then several until sufficient relaxation occurred. Dilation by the physician, in a busy office, is generally unsatisfactory, because the dyspareunia results from spasticity of the genital musculature which can be relaxed only voluntarily, and this relaxation is best done by the husband, with the associated emotional tone acting as a releasing mechanism.

In persons in whom the sex desire is overly-strong, the use of sedatives, suggestions, or hypnosis¹ is often of help. Likewise, much can be accomplished by cultivating outside interests.² However, if any permanent "cure" is to be accomplished there must be a change in attitude, brought about through discussion.³

Before entering upon the discussion of attitudes as such, it will be valuable to examine one or two cases which indicate both the relative nature of stress and the fact that even if stress cannot be removed, it can be alleviated.

Mrs. F. S., aged twenty-four years, suffered from severe headaches. They had been present for five years and were of such intensity that she had to go to bed. They increased in severity, and she was rarely free from them. She had all sorts of examinations, spinal punctures, x-rays of the head, and took "almost pounds of pills and quarts of medicine." No physical reason for the headaches could be discovered.

She had three children. Marriage had taken place seven years before her visit and had been with a man whom she loved, but to whom her family objected as being below their standards. She lived happily with him for awhile, but two years later found that he had gambled away all his life's savings, and even had borrowed all that was possible on his life insurance. She quarrelled bitterly, not only over the lost funds, but because he had lost his position and had to work as a milk driver for a relatively small wage. He would leave the house about 3 A.M. and not return till noon. When he came home he was tired and would go to sleep about 7 P.M. She had to stay home all day to take care of her children, and in the evening when she wished to go out, could not persuade her husband to go with her. If she went out alone, he rebuked her and became very jealous. She became secluded from all her friends, and saw only her own relatives. They invariably would bring up the subject of her husband's delinquency. She was ordinarily a very sociable person who had many friends, who liked being among people, and who wished to do other things beside stay home. She was practically incarcerated in her home. Her headaches developed on this background, and were the expression of the emotional tension she felt over her unhappiness and inactivity.

¹ Vide Ch. XI.

² Vide p. 253.

³ Vide p. 126.

The stress of being bound to her home, and her resentment over her husband's actions were the important forces in the etiology of her neurotic headaches. She was persuaded to change her attitude toward her husband. She was taught to regard the loss of the funds as an unpleasant occurrence which could nevertheless be forgotten as one of the many unpleasant experiences in life. She was then urged to go out among persons she liked, to attend the bridge parties she loved, to go to affairs with her friends, to attend club meetings; in other words, she was urged to enter into as much activity as her housework would allow. If her husband objected too strenuously, she was then to insist that she too was an independent human creature who was entitled to fun out of life; and that though she would rather appear with him, if he did not go she would go alone. She was taught to pursue this conduct without being upset. After a short period, her husband was seen by the physician and the same thing told to him. He did not like the new state of affairs but accepted it in part. The headaches diminished in intensity little by little, until four months later she had headaches only during her menses, and was not incapacitated thereby.

In this case, the situation precluded the possibility of separation from her husband, but a new adjustment was necessary before she could achieve any modicum of emotional release. She needed this emotional release in order to rid herself of the neurotic headache. She could not change her husband very much, but she could change her attitude toward the way she lived, and toward what he did. It was this change that brought about the cure.

No other aspect of life indicates more clearly the relative nature of stress than does the economic. Sufficient food and sufficient protection are basic;¹ but as soon as they are achieved, new desires and needs arise to disturb the balance.

Clothes that are presentable, recreational facilities, adequate care of children, provision for education may be considered almost essentials. Lack of them may make for ill-tempered parents, for chronic dissatisfactions, for emotional outbreaks, for anti-social and psychoneurotic reactions. Matrimonial disharmony and a home life that is fraught with frustrations and maladjustments may, in turn, be the direct result of the lack of adequate funds. Tolerance is much more possible on a full stomach than an empty one; and the feeling of insecurity at being far below the level of the community in material possessions reflects itself in a general feeling of inferiority.

Mr. S. O., aged twenty-nine years, complained of impotence and a peculiar weakness of his legs. These symptoms had been present for two years. In addition, when he tried to work, he was able to carry out his duties for only a few days after beginning his position, and then would become so weak that he would have to leave.

¹ *Vide p. 45 ff.*

He had been married for five years. Two children were born. He had cared for his wife, and although she was of a different religion, and although there were many protests from their respective families, they had felt they could get along. Actually, during the last few years, the topic of religion never entered their arguments. He was earning \$18 a week; and notwithstanding the fact that they lived poorly, at first they were content. After the first child came, however, the financial pinch began to be felt. They had to cut out many of their recreations, and so could not go with certain of their friends who liked various amusements. When the second child came, the expenses incurred drained them of all their resources. Their clothes became shabbier, and even the quality of food deteriorated. Tempers grew short, and quarrels became frequent. His wife changed from a helpful and encouraging person to one who nagged and complained of what she didn't have, and what she and the babies needed.

The patient became discouraged. He could find no outlets for his own emotion. He began to drink to forget his difficulties. His drinking created a vicious cycle by causing more nagging, which in turn caused more drinking; his two children had to be sent to his wife's parents in the country; he felt shaky and insecure with his wife; the guilty feelings over his drinking expressed themselves by weakness and later by his impotence.

This patient would perhaps never have developed these complaints had it not been for poverty staring him in the face. His basic inadequacy was precipitated by the financial stress; and secondary to the financial stress, there developed marital difficulty. When the moral support given by his wife was removed, the patient sought refuge in alcohol. The entire chain of events was predicated on an inadequate personality, but precipitated by his economic strain. Psychotherapy, here, consisted not in dealing primarily with the alcohol, but with the basic causes: he was urged to go back to work so that he could contribute to the support of his children, thereby to regain some of his self-respect. Since he did not drink constantly, the physician's moral support was sufficient to enable him to work steadily. He was an intelligent man; and possibilities for his future were discussed and the hopes for an adequate salary in the future were raised, provided he worked diligently and consistently. At the same time, his basic emotional problems, his dependency and need for the moral backing of his wife or someone else, the ability to bear responsibility without allowing it to become overwhelming were pointed out; and he was made conscious of his personality defects whenever they occurred. Simultaneously, he consciously forced himself to think in more constructive and independent ways. As time went by, the physician was able to remove his moral support;¹ the wife agreed to

¹ *Vide* pp. 220; 221.

cooperate, her life being made less dull by joining the local bridge clubs and recreational groups;¹ and the patient learned to accept life as it is, trying to change it, but not allowing it to be too irritating.

In this situation, the primary problem was the precipitating factor of financial stress; and the therapy was primarily directed toward getting the patient to change that situation in part by working. The next problem was to change his attitudes, his hopes, and his goals, so that he could maintain his position and strive for greater self-sufficiency. His personality inadequacies were brought to light, the patient was made aware of them, and consciously made to retrain his feelings of insecurity and to change them. The alcoholism was but a symptom which disappeared readily.

There are situations labelled "financial embarrassment," occurring in those homes wherein the income is sufficient for ordinary needs, but where the desires are far beyond the capacity of the pocketbook. These situations are more productive of neuroses than the former. In general it may be said that the more one must do something about pressing and actual problems, whether they be financial, physical, social, or otherwise, the less one tends to be concerned about one's self.

During a recent flood in the Ohio River valley, the city was inundated. The medical dispensary of its large hospital closed until after the high waters had receded. When the dispensary was opened, for some weeks the number of patients who attended was very small compared with the usual attendance. A social worker was sent out to investigate. She found the average patient working about the debris and mud-covered homes. "We ain't got time to go down to the hospital till we clean up this here mess." Their aches and pains receded into the background, while there were problems that needed immediate attention.

Mrs. O. K. was a "high-strung" person, according to her friends. She herself was constantly troubled by vague and fleeting aches and pains, was subject to headaches, and visited one physician after another for her weakness and troubled sleep.

She lived in her own home with two children. Her husband earned a comfortable living, and they had sufficient for the usual recreations and a small life insurance policy. However, she complained constantly to her husband about the lack of funds. Mrs. Smith had a maid; Mrs. Jones had a new car; Mrs. Clark purchased a new dining room set; Mrs. Johnson sent her daughter to a very expensive summer camp. The patient enumerated her desires quickly and unthinkingly. She was never satisfied. Every effort her husband made to please was met by grumbling because of its insufficiency. He worked overtime to increase his earnings, but to no avail. The patient's constant tension and desire could not be satisfied, and her symptoms were the direct result.

¹ *Vide* p. 253.

The complaint given here and the apparent etiologic force in her neurotic illness was financial stress. This, however, was again based on a more fundamental inadequacy; for even if this patient could have had as much money as anyone in the town, she would still have been chronically unhappy and neurotic.

Stress thus results from extremely variable forces, varying with the time, place, person, what has gone before, and what will come after. Such stresses as lack of food and shelter, physical disability or restraint, are relatively independent of the person's attitude; while such unsatisfied desires as special clothes, housing, education, money for vacations, recreations, etc., depend more upon the attitude than upon actual danger to the person's existence. Nevertheless, the advance of civilization has enabled man to shift the emphasis from the mere getting of food and protection to more sublimated and pleasure-giving forms of energy. What the man "feels" has become in many instances more important than what he as a physical organism "needs." Men will die for "freedom"; and it is generally conceded at present that man prefers to be able to go about as he pleases and obtain sustenance with difficulty to being placed in jail and having food and shelter provided. Man has as yet failed in spite of his intellect to solve the problem of preventing starvation and deprivation, irrespective of the fact that more than sufficient food and clothing is already existent. Some of the solutions have come into conflict with the attitudes which man has valued most (*e. g.*, living in a modern dictatorship with all its restrictions). Stress has, therefore, come to mean infringement on ideals as well as organic disturbance. When men become objective and tolerant, when they become determined to carry out, without bias and clear sightedly, those changes necessary for the greatest individual good compatible with the greatest social good, then will much of the needless stress and suffering, many of the distorted and psychoneurotic personalities disappear.

Since man has not adequately learned to make and balance these sublimated pleasures and pleasure goals called ideals, many disturbances appear in his goals, and consequently artificial stresses are created, simply because of what he has said he must have before he is satisfied. It is this tendency which is often present in the psychoneuroses. It is this tendency which must be evaluated before one attempts to remove the existing stress.

CHAPTER IX

RETRAINING ATTITUDES AND REACTION PATTERNS

THE medical care of physiologic factors, and the social care of environmental stress need to be accompanied by the change in the psychologic states or attitudes.¹ The terms "psychologic states" and "attitudes" are used for convenience and not because they are strictly correct. What the physician wishes to do is to change the person in such a manner that he will no longer respond to stresses with symptoms of neuroses. However, psychoneurotic symptoms result in large part from unhealthy and immature reaction patterns, and reaction patterns are interpreted psychologically as attitudes. The cure of the neurotic symptom is brought about by the changing of the person's unhygienic patterns of reaction; and this change, in turn, is accomplished by retraining attitudes. The changed attitude which is first a conscious and directed reorientation, will, if persisted in, result in a similar reorientation of the organism as reflected in the lowering of blood pressure, the decrease in muscle spasms, etc.

Attitudes may be arbitrarily divided into two groups: general attitudes and specific attitudes. The *general attitudes*, or orientations, are the *fundamental* general patterns of reaction by which many situations are met. They are the techniques of thinking, feeling, and responding to life's forces.² These patterns of reaction are laid down early in youth, and having been inculcated continue to be self-perpetuating. They are broad principles of action which apply to many specific situations. Certain nationalities, for example, are characterized by over-attention to the "manner and form" of acting in every day life; others are known for their stoicism in situations of great joy or of great sorrow; still others are trained early to work arduously and apply themselves continuously; others habitually give intense, immediate expression of their feelings. These attitudes are cultural patterns absorbed in early childhood by precept and example.³ They form patterns of response which continue even though the person is transferred to an entirely different cultural group. All persons are subject to the formation of such general attitudes which color to a large extent their future activity.

¹ Cf. Attitude formation, p. 48.

² Vide p. 60.

³ Vide p. 52.

Similarly, individual persons develop characteristic responses to situational stresses in individual ways. Normally, these patterns include attitudes of sociability, of emotional control, of a definite pursuit of some form of education or training, etc. In the psycho-neurotic patient, the reaction patterns tend to consist of irritable, egoistic, and over-emotional responses to almost every situation. The patient is trained so continuously, usually by the instability of the environmental forces, that such general reaction patterns become automatic. This instability is usually inculcated unconsciously by the very emotional instability of the parents, by their relationships with each other and their attitude toward the child.¹ Under such circumstances the child may become fearful of making any decision by himself because of a frequent tendency of the parents to criticize every action; and this fearfulness will extend itself into adult life, giving rise to what is called an inferiority complex.² Or the parents may be continually bickering; and the child identifying himself with one of them, and "taking the part of one of them," will yet feel guilty because of the social pressure to "love both one's parents." The vacillation³ between such conflictual points of view may turn the child into a vacillating adult full of conflict over opposite wishes and fears. Or the tense attitudes of the parents, and their tense and emotional ways of meeting ordinary life situations may be imitated by the child, who after all does not know instinctively how to meet life, and so follows the example of those about him. The child may withdraw under such pressures and become seclusive and asocial;⁴ or he may over-compensate for the pressures and become aggressive and driving. If the child is dominated by an over-solicitous mother, he may remain dependent all his life,⁵ seeking out some one to lean on long after his mother has passed away. If the father is tyrannical the child may react by meekness,⁶ or by a similar tyranny towards others, both instances often being associated with a tendency toward masochistic and sadistic behavior.

In these few examples, one may see that patterns of behavior are developed because of external pressures and because of the constitutional factors in meeting such pressures. *These general patterns of behavior, once established continue to perpetuate themselves; and even when the original irritations and forces have long ceased to be disturbing to the adult person, the habit factor will keep these general reaction patterns in action* so that all life will be reacted to accord-

¹ Vide p. 52 (Case B.). ² Vide p. 53 (Case M.). ³ Vide p. 81 (Case N. D.).

⁴ Vide p. 72 ff. ⁵ Vide p. 200. (Case N. T.). ⁶ Vide p. 212 (Case G. F.).

ingly. When (and if) the adult person begins to think for himself, and understands the immaturity of his responses, he finds that it is an almost insuperable problem to over-come these early formed traits. However, with the aid of the physician, who acts as a catalyst, and the persistent efforts of the patient, many of these reaction patterns *can* be altered.

While it appears quite clearly to the author, that environmental forces are the essential molding forces of each particular constitution, the psychoanalysts on the other hand insist that there are "deeper" reasons for adult neuroses. They insist that these general patterns and the fundamental causes of the neuroses lie in the unsolved *Oedipus situation*.¹ Freud (and his school of psychoanalysis) postulates an Oedipus situation in early life, where from the ages of two to five, the boy has incestuous desires for his mother; and he states further that the boy gives up these desires when he develops the castration complex; that is, when the boy unconsciously fears that his father will find out his incestuous desires and may castrate him for having them. Rather than be castrated, says Freud, the boy, still less than five years old, gives up his incestuous thoughts. Should such a solution fail, the child will then develop a neurosis in later life. The only effective therapy of the neurosis, according to the analysts, is to solve this Oedipus complex. The general attitudes present in adult life are, according to the psychoanalysts, governed by this Oedipus complex and its sequelæ.

Regardless of their origin, however, *general attitudes* become ingrained into the personality pattern so that they are habitual and automatic in nature. Often the emotional factors which first conditioned the person are lost to memory, and no longer exist as an irritating force, even though the results of these first emotional factors continue to influence the later life. Consequently, in the therapy of these general reaction patterns, the most important factor is that of retraining. There is no royal road to changing these patterns without consistent and persistent effort. Occasionally, however, the emotional irritations which first brought the reaction patterns into being, may still continue to operate unconsciously, so that the person reacts continuously to the memory of this irritation as if the actual irritation were still present. When such memory or "residual irritation" is present then the therapy consists not only in retraining the patient as to his

¹ Vide Appendix I.

habitual responses, but in altering his attitude toward this initial irritation so that he faces it objectively and unemotionally.

Superimposed upon these general attitudes, and indeed usually dependent upon them, are the *specific attitudes*. The separation between general and specific attitudes is arbitrary; for although the specific attitude is designed to meet a specific situation, the attitude will become general in character if it exists for a long period of time or if it is very intense. Specific attitudes are often the more *immediate etiologic factors* in the neurosis. The number of specific attitudes may be as numerous as the various situations one meets in daily life. Specific attitudes tend to differ from the early childhood reaction patterns (though there are many exceptions) in that the memory of the original irritation is more likely to continue to irritate the person as if it still existed in reality. Mr. A.¹ who lost his executive position a year before he came to the psychiatrist to be treated for hysterical aphonia, continued to have a "sickening feeling in the pit of his stomach" every time he thought of the loss of his position. Mrs. F.² had violent blushing spells every time she "thought" (unconsciously) of her husband's infidelity. Mr. I.³ became irritable and sadistic towards girls every time he (unconsciously) "thought" of his amputated leg. Such specific attitudes exist often as a background of specific irritability and color many conscious actions without themselves being in the center of attention at the moment. Within all broad orientations or attitudes there are countless specific ones, some of which may even run in contrary direction to the main one.⁴ A political reactionary may treat his servants in the most considerate and liberal fashion; while an ardent liberal, politically speaking, may be a tyrant to his maid. Some societies boast of great love for animals while still being opposed to the abolishment of child slavery in mills and factories. Contradictions in attitudes are more common than not, each attitude being formed by the interaction of environmental pressure and existing wishes and fears. These attitudes are many and may be specific to innumerable situations. For example, there may be attitudes toward food, toward certain kinds of food, toward certain kinds of food on certain days, towards certain kinds of food in certain situations. These attitudes which may be multiplied indefinitely are specific orientations, but emerge from and have some relation to the general orientations. The treatment of specific neurotic responses consists in changing the person's attitude towards the original cause, and therapy of such cause is

¹ Vide p. 125.

² Vide p. 69.

³ Cf. p. 68.

⁴ Vide p. 47.

usually the most important factor in removing the irradiation¹ of harmful emotion which tends to produce further neurotic symptoms. However, if these specific attitudes have been in operation for a long period of time, or are extremely intense, it will be necessary to treat the habit factor (*cf.* general attitude) as well as the "intellectual" attitude.

Thus one may say that every person has a basic foundation consisting of certain general or broad orientations of behavior, which are more or less the guiding principles in his way of meeting life. These general orientations may be hygienic and efficient; or they may be inefficient and symptom producing. Superimposed upon these general attitudes are secondary and more specific ones, often possible only because the soil has been prepared in early life. These specific attitudes tend to deal with more specific situations and problems; and in the neurosis, specific tensions or symbolisms may result from a specific "cause." All psychotherapy is directed at: (1) discovering what specific attitude exists behind the symptom², and changing that attitude to a more healthy one, and (2) retraining the person so that he responds automatically and with his total organism, in a hygienic and efficient manner instead of in a symptom producing manner. Broadly speaking, one may say that general attitudes require much greater emphasis on retraining, while specific attitudes of comparatively recent genesis require more emphasis on removing the "unconscious" irritating memory.

TECHNIQUE OF CHANGING ATTITUDES

The principles of this technique have been discussed in Chapter VI. In essence the attitudes and reaction patterns of the organism are changed by: (1) bringing to conscious attention in specific detail the unhygienic attitudes and their attendant irritating memories, (2) removing the emotional tone attached to the memories, by intellectual understanding and by desensitizing the patient through repeated discussion,³ and (3) retraining the patient so that he will react automatically in a hygienic, efficient, and non-symptom forming manner to the various stresses of life. These changes cannot be brought about simply by the patient's being aware of what he should do; consequently, very few patients are aided by reading books on treatment. A catalyst is usually necessary; and the catalytic process is, in large part, effective in proportion to the physician's skill, and to the amount of positive

¹ *Vide* p. 81.

² *Vide* p. 183 *ff.*

³ *Vide* p. 182.

rappor¹ present. Time and persistence are essential elements in making the changes permanent and automatic.

Preparation of the Patient.—The procedure outlined above lends itself to patients whose symptoms even to the patient are, from the outset, obviously psychogenic in origin. There are many more patients, however, in whom the symptoms appear to be organic even though they are psychogenically determined. These patients, as a rule, cannot be approached immediately with the statement, "Your pains are the result of emotion." It is necessary to prepare the patients first so that there will be no antagonism. Very much depends on the personality of the physician and the way he phrases his diagnosis,² as well as on what he says. There must be a sympathetic explanation, and even a yielding occasionally to the patient. Before presenting the psychoneurotic formulation of the illness, the physician should be well convinced, and well fortified in his conviction by having made thorough physical examinations and tests, that there is no fundamental organic pathology, or if there is such a pathology, that it in itself cannot explain all the symptoms. Only then can the physician speak with conviction and certainty and point as proof to these examinations when the patient insists on some organic pathology. Nevertheless, it is not necessary to perform tests which are unessential, simply for the satisfaction of the patient. Thus, *x*-rays of the skull because of a transient throbbing in the temples, or electrocardiograms for "palpitation of the heart" which shows no other signs of pathology, generally are a waste of the patient's funds and allow the patient to continue in that state of mind which makes him ask for the miraculous *x*-ray whenever any ache or pain occurs. On the other hand, pain in the epigastrium after meals, a constant hacking cough, persistent pain over the eyes, etc., may well be studied by roentgenograms. However, the judgment of the physician is important. Moreover, practically all these examinations and tests should be done before psychiatric diagnosis is given so that the patient will not be able to counter with suggestions that he wasn't adequately studied.

Bob H., aged fourteen years, came in complaining of severe headaches which had been present for six months. He complained of their persistence and their severity. He could not go to school, and spent most of his day in bed. His mother was a fond parent who sympathized and mothered the boy a great deal. Neurologic examination was negative, and *x*-ray of the sella turcica showed no bony pathology. The diagnosis was made of a

¹ *Vide* p. 133.

² *Vide* p. 222.

psychoneurotic headache, and an attempt was made to change the attitude of the mother and the boy. The headaches increased in intensity, and the boy complained of such pain as to make him threaten to commit suicide. His symptoms did not appear to be psychoneurotic and there were no other symptoms of instability. An E.N.T. specialist was consulted, and transillumination and x-ray showed sinuses choked with purulent pus. Drainage of this pus resulted in immediate and complete relief.

On the other hand, the reverse situation is frequently found. A physical symptom may be "diagnosed" as being of some obscure organic pathology and treated by "injections," which fail to give any sort of relief because they leave untouched the personality difficulty underneath.

Mrs. O. P., aged thirty-two years, mother of three children, complained of severe headaches for three years. No organic pathology could be found, though the sella turcica appeared slightly larger than "normal." On the strength of this meagre evidence, and for some vague reason suggested by advertising circulars, antuitrin was given twice a week. The headaches were not only unrelieved, but actually continued to increase in intensity. In spite of the fact that no relief was given, the antuitrin was continued, being given some weeks daily and never less than twice a week for the next three years. With two hypnotic treatments, the headaches ceased; and although they tended to recur on the slightest provocation, the ensuing psychotherapy, by relieving the patient of her emotional stress secondary to her husband's infidelity, brought about a complete cessation of the headaches.

Having come to the conclusion that the symptoms are the result of psychogenic factors, the physician broaches the subject to the patient. The general technique of telling these facts to the patient is roughly as follows, although it will be remembered that in this instance as well as in all others cited in this volume, it is understood that there is no *one* way, no hard and fast rule, to do anything. Individual situations call for individual therapies. Generally, the patient is told that no organic pathology of any significance has been found in all the examinations; that if there is any organic basis for the complaint it certainly cannot be serious in nature, though it may be irritating; *e. g.*, in the same manner as is a toothache; that emotional tension is one of the most important forces which may aggravate some actual organic ache or pain which in itself might be easily borne; and that it is important to treat these emotional forces. The physician must then proceed quickly to those symptoms which the patient recognizes as being "emotional," point out how these symptoms are "aggravated" during periods of tension, and outline in simple terms the mechanism of tension and symbol formation.

Often a patient, after such a discussion of the nature of the symptoms, will ask, "Does this mean that I am crazy?" Then the physician explains that emotional disturbances are common; that occasionally these emotional reactions "work inwardly" and affect one's organs without one's being aware of the influence. This situation often occurs in intelligent persons who are far from being "crazy." Moreover, when a person is under tension, any actual physical ache which may be mild in itself is intensified. "But how can tension produce pain in all these parts of my body?" is next asked. The answer to the patient is diagrammatic,¹ analogous, and simple. "The reason one feels pain anywhere is that the brain receives sensations of pain. If the brain is in a state of excitement, any stimulus that comes to it from the periphery is felt more keenly than usual;² and if there is a mild 'organic' stimulus causing this pain in you, it would hardly be noticed except for the fact that emotional tension has aroused the irritability of the brain." Such explanations are deliberately diagrammatic and over-simplified, for only by such explanations can the patient grasp the basic truths involved. In general it is well to understand that patients will comprehend better and cooperate better if they have some reasonable explanation for their illness and for what is being done for them. As a rule, the background of the patient is inadequate to enable him to understand the mechanisms in physiologic or psychologic detail; but some simplified statement, while it is not theoretically exact, is adequate to give an understanding of what the physician is trying to do. When patients are suffering from "spastic colitis," where the etiology is some psychologic disorder, one may answer the question of how emotion can cause colitis somewhat as follows: "The term spastic colitis means that the intestinal tract is in a state of spasm so that normal peristalsis is interfered with. Spasm means contraction of muscle, and muscle contracts when there are many nervous impulses coming to it. There are many causes of increased nervous impulses, but in this case the basis is an increased flow of impulses down the nerves from the brain. This increased flow occurs because the brain is in an increased state of excitability; and this in turn is the result of your emotional state." One may then add, when speaking to patients in whom there are many other symptoms beside "colitis," "That is why you have such a rapid heart at times, and why you get headaches: all parts of the body are connected with the brain, and emotional excitement is transmitted to all parts; some parts

¹ *Vide* p. 219.

² The reverse may also be true.

such as your head, your heart, and your intestine are more susceptible and hence your symptoms are there. In other patients in whom the skin, or bladder, or other part of the body is most susceptible, symptoms will show up in those parts." Some such explanation couched in the terminology which will be best understood by the patient is very effective. It places the origin of the difficulty where it belongs, in the emotional stress, and at the same time gives the patient an understanding of what needs to be treated when a symptom does occur. It makes him realize the necessity of cooperating in the changing of his attitudes.

Unearthing the precipitating and determining memories has been discussed in Chapter VII. *Desensitizing* the person toward the emotional tones present in an irritating memory is accomplished by having the patient formulate very specifically just what it is that he is irritated over. So many irritations are vague and unclear to the person, so that when they are stated in some definite fashion they tend to lose their force; and their immaturity becomes obvious even to the patient. The discussion of just how the patient should deal with the original irritations and what the mature responses would have been and are, is very effective in removing the emotional unrest, the "bound energy"¹ produced by the memory. The very fact that the patient can discuss the "hurts" of the past in a calm, objective fashion with the physician who is clearly analytical and objective, is therapeutic in removing these emotional tones. Oftentimes, the patient may feel very disturbed "at the very thought" of the irritating memory, but upon insistence, and repeated discussion, the patient will become desensitized to the irritation. Repeated discussion with the patient about the problem is very much the same as the use of pollen vaccines for the hay fever sufferer; desensitization should be done by mild and superficial discussion at first; deeper, more pointed, and even more pride wounding discussions may be carried on later, as the patient builds up a tolerance and an ability to withstand the shocks.

Mr. J. M., a freshman in medical school, wondered whether he should give up the study of medicine, for whenever he went into an operating room, he fainted at the sight of blood. In addition to the analysis of the causes and the changing of the boy's attitude toward his basic problems, *desensitization* was carried out. The student was told to walk into the operating room during an operation and immediately walk out. On the second day he was to walk into the room, count five, and walk out; on the third day he was to stay a full minute and walk out; and each day the length of time he stayed was increased. In two weeks the student reported that on the pre-

¹ *Vide* Ch. XII.

ceding day he was supposed to remain for ten minutes, "but I got so interested in the operation that I forgot how long I was to stay." In other words this boy was desensitized to his fear by small but increasing doses of that which he feared. He had no trouble thereafter about witnessing blood.¹

Retraining Attitudes.—The attitudes which the physician attempts to retrain should be as fundamental as possible, and the principles of feeling and acting to be inculcated should be as general as possible. Treating symptoms or secondary attitudes alone is like cutting off the tops of weeds without uprooting them. To say to a person who fears insanity, or anything else, "Train yourself not to be afraid," is dealing with the problem only superficially. The physician needs to know "why" the person is afraid, and change the attitude towards the cause. The "why" can be determined (as seen in Chapter VII) and that "why" must be treated, else failure is bound to occur.

Miss S. G., aged twenty-five years, complained of having "terrible thoughts." When she thought of her boy-friend she wished he were dead; when her mother went down the stairs, she "wished she'd fall and break her neck"; when her sister spoke of going to the beach with her infant daughter, the patient "hoped that they would both drown." These thoughts "make me hysterical. I love them; why should I wish such terrible things to happen. It drives me wild, makes me feel I'm crazy and don't belong in society; maybe it's best for me to end it all than to go on thinking such terrible things about those I love."

To try to train this patient to change her attitude toward these persons by instructing her merely to "think kindly" of them would and did meet with failure. She had tried to do so herself and was encouraged in her efforts by some of her closest friends. Only after getting at the bottom of her trouble and ascertaining the determining mechanisms was it possible to suggest a constructive attitude for her to adopt. The first step consisted in inquiring into the *specific* difficulties which existed at the time of the onset of her symptoms.

She was in love with a young man three years her senior. He possessed all those personal qualities which she highly admired. When she was in his presence she was very happy and had a good time. None of the other boys she went out with compared with him in the qualities of gentleness, intelligence, good nature, etc. There was, however, one fly in the ointment. He was short, and he was homely to the point of ugliness. She had always despised short and ugly men.

¹ Many persons have a tendency to faint at the sight of blood. The most common reason for this fainting is that the spilling of blood and its connotations of danger and death arouse an almost reflex fear and excitement; and the emotional tension is associated with vasomotor spasm which produces in the brain a temporary cerebral anemia and, consequently, a fainting spell.

It might thus appear that the fundamental approach to the treatment was to develop in this girl the attitude that handsomeness in a man is of secondary consideration; for this concern of hers appeared to be at the basis of her particular symptom. The young man had asked her to marry him and she had consented. Then she had begun to think of how persons would point him out, how ugly her children would be, and so forth. Though she spontaneously said to herself that character was more important than appearance, she could not get herself to "feel that way." It becomes necessary to ask the question, "Why does this girl attach such an overwhelming importance to physical appearance; isn't this attitude in itself a symptom based on some more fundamental difficulty?" These ideas about the handsomeness of men, and what others would think about her were unhealthy specific attitudes; and were likely to be based on more fundamental unstable general attitudes.¹ It thus became necessary in the therapy to determine just what her fundamental *general* attitudes were.

Miss S. G. was the oldest daughter. She was about 5' 1" tall and was very attractive. She lived in a home which was known for its emotionalism. There was constant quarreling, and at the same time a general air of superiority expressed by each member of the family regarding his own ability and the lack of ability of others. The patient was given her own way in everything and was constantly admired for her cleverness and beauty. She became conceited, and at the same time developed an attitude of inferiority when anyone did anything which gained praise, for she continually contrasted herself with others, and felt slighted if she was not the center of attention.

She worked in an office, and because of her intelligence and enterprise was put in charge of her office force. The salesmen all "raved" about her beauty. The patient boasted of never deigning to consider a fiance who wasn't handsome and financially sound. She was a beauty, she and her family said, who could choose the best of prospective husbands. Her whole philosophy pointed in the direction of overweening self-esteem. She was anxious to obtain the approval of other people, to be able to look and act superior. She wanted her own way, and had a violent temper when thwarted. When she met her "ugly fellow," she was surprised that she cared for him. Her feeling grew into "love," which made her unhappy when she was separated from him. She looked forward constantly to seeing him, to being with him, and to hearing his voice over the telephone. At the same time, however, her entire attitude toward life, and her expectations, and her desire to be able to "show off the catch" she had made in a husband were at war with this "love." A great conflict arose within her; should she sacrifice what she had always wanted, or should she sacrifice her "love"?

¹ *Vide* p. 175.

It thus became increasingly apparent that the patient's "terrible thoughts" were the result not simply of her desire to marry a handsome man, but of the fact that from earliest childhood, the patient had grown up in an atmosphere of "superiority," lack of consideration of one's fellow man, irritability, and bickering. These general factors expressed themselves not only in her desire for handsome men, but in her manner of speaking to others, in her attempts to be something other than what she was, in her being overbearing at work, and in her feeling of inadequacy at not achieving the heights she had so falsely evaluated. Her general pattern of reaction to many factors in life was essentially the same.

It would thus appear that the fundamental factor had been reached—a basic, inculcated egocentricity. However, if we use the formula that neurotic symptoms are the result of stress acting upon a constitution, which in turn is the result of environmental modification of the inherited constitution,¹ we have ascertained the Stress (the idea of marrying the ugly young man) and the Environmental pressure (the unstable home environment with its spoiling of the patient and the inculcation of unhygienic ideas), but have not determined the constitutional background.

In Miss S. G. the background was very significant as to heredity. Her mother was "very nervous" and high strung; her sister had "something like a breakdown" after puberty but recovered; one maternal aunt was very "nervous" and had a breakdown at the age of forty, when she had to be in the sanitarium; one maternal uncle was brilliant but irresponsible, and even at the age of fifty-five had to be "looked after"; one paternal uncle was "perfectly normal," but had three sons and two daughters all of whom were "peculiar."

Although it is impossible to separate the influence of family training, such a history is certainly indicative of an inherited predisposition. It thus may be said that the heredity was a "fundamental cause" of the neurosis. In Miss S. G. this inherited predisposition was, however, greatly modified by environmental pressure, so that one may say that there were several fundamental causes.

A fatalistic outlook because of the constitutional factor is not only erroneous, but definitely injurious. These patients can be aided, and aided greatly. In terms of social adjustment and contentment, these patients may even be "cured." A therapeutic

¹ Symptom is resultant of $S \times E \times \text{Inh. C.}$ (S = stress; E = environmental pressure; Inh. C. = inherited constitution).

approach is not one of bland optimism. From what has been said, it may be seen that the patient is the result not only of the inherited factor but of the environmental forces. Under adequate and intelligent guidance it is not only possible, but likely, in view of the succeeding events, that she would *not* have suffered from such an obsessional neurosis. The molding forces which man can bring to bear on inherited defects are great, and many deficiencies which are "inborn" may well be compensated for by training. Therapy directed at developing the patient's assets to the fullest may often more than compensate for liabilities. In many instances, however, one does not disregard the constitution. For example, a constitutionally feeble-minded child¹ may develop psychoneurotic symptoms as the result of situational stress acting upon an inadequate constitution. In the therapy of such a person, one must consider the constitution, and attempt to inculcate only such attitudes as can be absorbed, and treat the environment even more than the patient. Psychopathic personalities must be similarly considered. Even so-called normal persons may be "constitutionally" adequate to meet only the mildest of situational or psychologic stresses; and many of these persons may become psychoneurotic patients.

Having determined and evaluated the fundamental causes, and the possibilities of therapy, physically, socially, and psychologically, the physician should proceed to give *specific suggestions* as to methods of cure.² Individual attitudes should be discussed in detail, and the original ideas should be discussed as to their immaturity, their ineffectiveness, their egoistic and asocial character, and the role which they play in the production of tension and symbolism, and of unhappiness. Such "intellectual" understanding carries with it the force of urging the patient to change his attitudes. If despite such understanding the patient constantly reiterates as did Miss S. G., "Yes, I know this is true, Doctor, but all I want is to get over my funny ideas," she is to be told again and again, that the ideas are "funny" because her fundamental attitude toward life is "funny," and to cure the "ideas" she has first to remove their basic cause. The physician must be firm, definite and concrete. He must be specific and give frequent illustrations from the patient's own life, as to what he means. Thus, for example,

Miss S. G. readily agreed that her attitudes were childish and immature. She also quickly agreed that it was more mature to be less egoistic and more objective. She understood that the centering of attention on herself, and

¹ Vide p. 163 (Case N. L.).

² Vide pp. 131; 196.

the desire to "show off" and be superior in these artificial ways indicated immaturity. She agreed to try to *change these basic attitudes*. When she felt or acted "superior" on *any occasion*, she was consciously to say to herself that superiority is a matter of character and ability and not of social position or of appearance, and that she would evaluate the situation in this light and not permit herself to think in a wish-fulfillment manner. She told, for example, of "putting on airs" before one girl in her office. This habit she was "consciously" to change. She told of refusing to go out to parties with a certain young man she thought well of except that he wasn't "good looking," and she agreed to see him, and while with him "consciously" to change her stream of thought should it revert to his appearance. She told of conversations with her family and certain of her girl-friends in which the general tone of the discussion was to make odious comparisons and comments; and she agreed to try to make the conversation as far as she was concerned less derogatory in nature.

The patient was urged to *think consciously* according to the suggestions given. In effect, the patient was to say to herself, "Those old attitudes were immature; I shall try to believe and feel and act according to these new attitudes." Every opportunity that arises should be made an occasion for the subject to practice his newer way of understanding. The more persistent the patient is in his efforts the more surely will the immature reactions be uprooted and the more surely will the mature ones be grounded. The more the patient wishes to change, the quicker he will change.¹ The fact that he may feel, "I have always been this way," or "This is my nature," makes the changing more difficult but by no means impossible, provided the subject is willing to cooperate.

In other words, this girl was taught consciously to change her attitude toward every action which was a specific manifestation of her general attitude. Specific suggestions were constantly given, and what is most important, were carried out successfully after a few trials. She learned how to put her "intellectualized" concept into action, which in turn soon became so much a part of her as to be basic in a new personality.

The change which occurred was obvious not only to the patient but to observers. Indeed, one of the first signs the author deems important prognostically is the spontaneous comment to the patient by a friend who does not know that psychiatric therapy is being given, on how much more relaxed and calm the patient appears to be. The entire expression of the patient becomes more reposed, and the facial appearance, the manner of speech, the attitudes are indicative of this new quietness of spirit.

¹ Vide p. 195.

In many instances, the most important element in successful therapy is to have the patient willing to change. The very attitude of setting up as a goal a new type of attitude is in itself corrective. Learning, in general, is the result of practice directed toward a certain goal. As long as the goal is there, the number of failures is in itself unimportant.¹ There are bound to be failures in adopting a new attitude, particularly in the beginning. Patients become discouraged and state, "It's no use; I guess I'm not built that way." Yet, if they are willing to change, such failure is soon reversed.

Steady reassurance and encouragement by the physician are important during the early part of this retraining. Belief in the patient's ability, the assurance that many other patients in similar situations have recovered, the understanding that the difficulty has existed for so many years and is not easily overcome, though it will be conquered, are all supporting for the patient. It is important to persist in the training, despite recurrences of symptoms, which as we shall see when we discuss prognosis, tend to recur even during improvement.² Too often a physician will attempt to apply these techniques, and not succeeding in one or two visits will try some other remedy. Obviously, a personality trait built up over a period of years will hardly be remedied in so short a time. It is important to carry the training to its logical conclusion.

The physician must be careful to avoid making a moral issue of the subject;³ for it is not a question of moral issue, and the patient not only resents such an implication, but worse, fails to learn to solve his problems without the fear of guilt or sin. The arguments advanced must carry their own validity and be logically correct; the patient must be persuaded, and not driven, to accept them. It should be pointed out that the psychoneurotic actions are immature responses, those which are present in childhood and adolescence. Maturity is something to be acquired, and can be achieved only after childish attitudes have been abandoned.

Miss S. G. was seen twice a week for one month, and then once a month for a year. Some patients can be well started on the road to a change in much less time; others require more time. At the end of that time, she had lost her obsessional ideas, and was content to go everywhere with her young man. In addition, she stated, "I have many girl friends now, something which I never had; when in a group, I am at ease, and can talk freely without always being aware of what others think of me or what they may say; I am no longer disliked by the girls in the office, and instead of thinking me overbearing and 'stuck-up,' they're very friendly and congenial." The

¹ *vide* p. 207.

² *Cf.* Ch. XIII.

³ *vide* pp. 133; 475.

patient changed in a myriad of ways. Her very walk, which when first seen was a stilted, ostentatious, "peacock strut," became a more relaxed normal gait. In other words the entire psychobiologic reaction pattern was influenced "unconsciously" by the changed "attitudes." This patient came to understand the cause of her ideas, and the role of the early general orientations; and she cooperated in a consistent effort to reorient and retrain herself so that the old attitudes were discarded and mental hygiene attitudes became automatic. A long period of time was necessary to obtain a full result, for attitudes acquired over two decades can not be altered in two weeks; and the physician acted as the catalyst, who provided moral support and encouragement, until the patient was able to stand on her own feet.

It is not so important to teach the patient what specific attitudes to have toward specific situations as it is to teach him the technique whereby he will be enabled to develop healthy and efficient attitudes toward whatever situation may arise. Stated more simply: it is more important to teach the patient *how* to think; *i. e.*, to discriminate, evaluate, reason logically, etc., than it is to indoctrinate specific facts and theories, however valid they may be. Facts, knowledge are of value only if the person can use them; and the making of intelligent decisions based on such facts presupposes that the person has developed the ability to think. Moreover, it is not enough to rid the patient of certain harmful or ineffective attitudes and inculcate others; he must formulate his own general attitudes that will make it possible for him to deal with specific situations.

Miss S. I., aged twenty-four years, complained of severe dysmenorrhea. Violent pains assailed her during the entire menstrual period; and for several days before and for several days after the period there was extreme lassitude and irritability. Physical examination revealed no pathology, and the use of ovarian extracts proved of no avail. Further examination revealed that the patient was "nervous," that she startled easily, that she had always been easily excitable, and irritable. The most important "cause" in this girl's case, was the role of the dominant, irritable, demanding, and highly neurotic mother, who by her attempts to control the lives and actions of her children had rendered them unhappy and unstable. One of the important elements of therapy was to train this girl to change her attitude toward the mother, so that she would listen carefully to what the mother had to say, and then, in her own mind, decide what was the right thing to do. She was then to tell her mother, objectively, quietly, and unemotionally what her conclusions were and, where possible, to act on her own conclusions. Her entire attitude toward life was to be converted from the emotionally dependent, cringing, unself-reliant type of reaction to that of an independent, reliant person responsible for her own decisions and actions. When the patient learned this procedure, in addition to other changes, she lost her "nervousness," and her dysmenorrhea could be easily relieved by aspirin.

There is no one attitude or set of attitudes that are the *sine qua non* of effective living; it is by no means suggested that all persons should think and act in a prescribed manner. There is no virtue in conformity *per se*; individuality calls for many and varied types of action and reaction. There is only one general statement that can be made: one's attitudes should not make for a disturbed emotional state, and even this statement has exception. In other words, whatever one decides to do he should do without feeling irritable, or needing to express tension in an unhealthy fashion. It is not the physician's purpose to set cut and dried standards for every one to follow but to see to it that those standards which are followed are not unhealthy. Since persons differ so much, standards for one may be inadequate or wrong for another.

Miss K. D., aged thirty-six years, complained of gastrointestinal difficulties. The complaints were vague and non-specific, and the attending physician ordered a complete laboratory and x-ray examination. When these reports returned "without pathology," he inquired more carefully into her other symptoms; and the patient poured out a host of complaints which seemed typically neurotic. During the first psychiatric interview, she stated, "I should have known from the beginning it wasn't my stomach that was ill; I've been worried over a boy friend and that's what affected my stomach." The patient revealed that she had been keeping company with a divorced man, ten years her senior. He was brilliant and kind, and he filled a long felt need in the patient's life. After three years she suddenly discovered that this friend was seeing another woman at the same time; and though she berated him, he refused to give up either of his "girl friends." The patient became extremely jealous, and in the natural sequence of events, the other woman discovered the patient; the mutual jealousies added to the fire. "In the last two months I lost 15 pounds, and menstruated for fourteen days." This extremely frequent "triangle" was the specific cause of the patient's "stomach trouble." Some of the more general reaction patterns included seclusiveness, and the absence of any friends, and an over-dependence on an invalid aged mother with whom she lived and who dominated the patient's every move. The therapy was directed first to changing her attitude toward her "boy friend," and making up her mind that she voluntarily give him up, since the whole situation could not result in anything but unhappiness. She was to understand the futility of jealousy and actions based thereon. She was to avoid seeing this man and to do her best "mentally to give him up." In addition to this specific change, she was urged to cultivate a more extrovert attitude toward friends, to be more sociable, and to break her emotional dependence upon her mother. Her gastrointestinal symptoms cleared up in one week, but it was two months before she could be made sufficiently emotionally stable to prevent a return of symptoms.

It will be further noticed that the advice just given is relatively, not absolutely important. It is good for the person and for society for man to be somewhat dissatisfied with things as they are. Dis-

satisfaction and irritation call for changes, and changes if well controlled and guided make for a better situation all around. This dissatisfaction should not go to the point of preventing the person from solving his problems in a most efficient manner. Consequently, when a patient asks, "When will I be completely happy and not dissatisfied?" it is well to discuss these points with him.

Just as there is no absolute standard of attitudes, so is there no one method of removal and substitution of attitudes which rigidly followed will always be effective. Each physician must make specific application of the general principles discussed, and the success of the therapy will be determined to a large extent by his ability to meet the particular needs of his patients.

CHAPTER X

CHARACTERISTIC GENERAL ATTITUDES AND THEIR TREATMENT

THE "psychological"¹ attitude, which is but one facet of the total "physiological" and constitutional reactivity, is the conscious or unconscious pattern by which the person reacts to any particular stimulus or circumstance. These general patterns,² or orientations to situations, are largely determined by deliberate (or conscious) training and by environmental pressure; and like other responses take on the automatic nature of habits. The problem of therapy is the problem of retraining the patient and is two-fold: (1) breaking down or removing those attitudes which are unhealthful or immature, and (2) substituting and making automatic more efficient and mature orientations. To label certain attitudes as "immature" and laud others as "mature" is not enough.³ Rather, there must be detailed analysis⁴ of each specific attitude so that the patient will realize how it came into existence, and wherein it is inadequate. When the patient realizes that his present attitude fails to give him that which he desires it is possible convincingly to present more mature ways of thinking. As soon as the patient gives his intellectual consent to the desirability of the new attitude, the next step is to show him how consciously to apply the attitude in the specific problems with which he is confronted, and to persist in consciously training him until the desired attitude becomes automatic.

In the following discussion of the more common mature and immature attitudes and techniques of thought, specific suggestions will be made as to how to remove or inculcate them. It is essential to remember, however, that these suggestions are only *some* of the methods by means of which the orientations can be changed. Just as there are innumerable variations in the attitudes and ways of thinking which need correction, so are there in the methods which can be utilized effectively. Individual patients always require individual therapy. However, it may be said, in general, that the *therapy which is most likely to be of permanent value is that which teaches the patient to be self-reliant, to be cognizant at once of his limitations and his assets, and to react to situations in terms of an*

¹ Vide p. 174.

² Vide p. 174 ff.

³ Vide p. 196.

⁴ Vide p. 132.

objective perspective of himself in relation to his environment. Further the reader will need constantly to bear in mind that there are relatively few clear cut pictures of single symptoms; so that although the various attitudes are discussed separately for the sake of clarity, in reality the psychoneurotic patient usually presents a symptom complex; and though the physician may focus his attention on a particular attitude that is manifestly immature, the problem is not one of single attitudes but of the total personality of which the particular attitude is but a reflection. The following discussions are perhaps over-simplified, but they have the concrete value of showing how the principles of therapy discussed in the preceding chapter can be practically applied to bring about changes in attitudes and consequent personality reorientation.

EMOTIONAL THINKING¹

At the basis of most immature attitudes will be found "emotional thinking" which consists primarily of jumping to conclusions because of the undue influence of wishes or fears, or because of the lack of training in the proper way of thinking. The term "emotional thinking" is used advisedly though it is patently paradoxical and self-contradicting and must not be confused either with emotion truly understood, nor with thinking as a logical rational process. Emotion is an integral part of the bodily process, and the expression of the basic drives and energy of the organism. Emotion may be suppressed or emphasized but not removed; nor is it desirable that it should be removed. Just as emotion without the direction and control of the intellect defeats itself by its own excesses, so the intellect without the driving force of emotion remains sterile, incapable of accomplishment. It is man's affections, sympathies, sorrows, antipathies, and aspirations that urge him to effort and achievement. There are many persons who have excellent "minds" but who accomplish little because their ideas are not translated into action, action itself being a form of emotion.

Emotional thinking is the antithesis of logical thinking. Logical thought or reason is direct, clear, influenced only by facts, and based on premises arrived at objectively and understandingly. Reason evaluates facts dispassionately and faces them as they are, without attempting to alter them by either wishes or fears. Emotional thinking, on the other hand, is unclear, associated with emotional turmoil, vague in its premises, and subjective to the

¹ Cf. Primitive Thinking, p. 49.

point where perspective is lost. Every person is more or less subject to this fallacious type of thinking, particularly when confronted by situations in which his ego may be threatened. It is relatively easy to be objective about impersonal matters; and, conversely, difficult to subject to "the cold light of reason" anything which, however remotely, impinges upon one's ego. Accordingly, the greatest progress in civilization has been in technical matters, since they are relatively free from emotional distortion; the least progress has come about in social reorganization because of the intense emotional tone associated with the solutions suggested. Emotional tone blurs the facts, and confuses the logical process in evaluation of the facts. Rational thinking which is basically objective leads to understanding; emotional thinking which is primarily selfish and subjective tends to result in antagonism and anger or in neurotic affections.

Mr. K. lived with his parents, two sisters and one brother. He would leave the house in the morning and come home late at night. On Sundays or holidays he would avoid his home as much as possible. For six years he had not spoken to his brother, and he answered his parents only in the most curt and abrupt manner. He had many neurotic traits. "I'm twenty-eight, and my mother treats me like a baby. I have to give her everything I make, and if I hold out a few dollars, she's mad. When I was out of work, she and my sister didn't speak to me and I didn't to them. They said I was lazy. They are against every new idea. They follow the ideas of the 'old country,' insist that I'll go to hell because I don't believe as they do, and they call me a good-for-nothing. They never think whether a thing is right or not; they like it if it's the same as what they were used to; and they are against it if it's in any way different from what they already think. They are good at heart but they sure can hate."

This man of twenty-eight sulked like a child; but his childish reaction (in this instance a synonym for "emotional") thinking was but the mirror image of the emotional thinking in his environment. He was not spoken to because he did not earn money; and since the parents needed money, they assumed that the patient did not earn it because of "spite." Not only did they take no cognizance of economic conditions, but they also blamed him for their own difficulties. Their actions toward each other were not thought out in any rational or logical manner, but were primitive expressions of distorted personalities, justified by the pseudo-logic called rationalization.

The treatment of emotional thinking may be done by direct and conscious training of the patient. The general pattern of responding emotionally must be replaced. This concept should be con-

tinuously held up before the patient; and specific examples given constantly. The changed emotional thinking will show itself in many ways. Often the changing of the patient results in a different attitude on the part of the family. Dr. E. X., a medical student, whose home life was very similar to Mr. K.'s, told me one day how the attitudes of the entire family seemed to have undergone a revision with the change of his own personality. Undoubtedly, part of this family change was the result of the altered manner in which the patient viewed their reactions, but much of it was real change. The patient himself must first be persuaded *to wish to change*.¹ It is surprising how many patients will come for treatment and yet insist on doing things the way they wish and not the way the physician prescribes. It is here that the problem of rapport² comes into play; and the more the patient feels he is "understood" and his difficulties appreciated, the greater will be his cooperation. The first step in removing the emotional thinking is a detailed explanation of what it is. Then specific experiences in the current life of the patient should be analyzed, and both the incorrect and correct (correct because effective) forms of behavior in the specific instances pointed out. For example, Mr. K. was told that not only his family but he also did not think logically. He was asked what logical reason lay behind his not speaking to his brother. He could give no reason other than that his brother and he were angry at each other, and that his brother would probably not reply even if he did speak. "Besides, I won't give him the satisfaction of having me speak first." It was pointed out to him that carrying a grudge was immature behavior; that irritations between persons are common; but that if grudges were generally kept, no two persons could live together. Moreover, it was emphasized that not only was it far more mature to be friendly and tolerant, but also that his constant attempts to bolster his self-respect indicated a basic lack of self-confidence. The emotionalism directed towards his brother was but one aspect of his sense of personal insecurity and of his tendency to self-blame. It was necessary to *reason out* how, without the bias of anger, he should act towards his brother, and then to persuade and encourage him to carry out his plan. He was advised not to be obsequious and try to curry favor, but rather to speak pleasantly whenever the occasion would ordinarily require speaking. He should continue to speak even though he received a discourteous answer or even none

¹ *Vide* p. 188.

² *Vide* Ch. VI, p. 133.

at all. Moreover he was to realize that the purpose of his changing in regard to his silence was not primarily to be courteous to his brother, but to learn to be without the anger towards himself, which almost invariably accompanies such anger towards another.

It will be observed that merely stating that his attitude was immature was not sufficient; indeed such a statement alone would tend merely to produce a defense reaction.¹ Detailed reasons for its immaturity were given, as well as specific instruction as to what constituted maturity. The patient was shown how, in a more certain and efficient way, to get what he wanted. He could understand that this newer method was not only more logical but would make him happier. Value to the patient is quickly recognized and adds force to the persuasion of the physician. However, since the emotional attitude has usually been existent for many years, it can rarely be removed by a single explanation. Intellectual acceptance is insufficient, and the subject must be *trained* into the new habit. Care must be taken lest the physician alienate patients, for irritation, impatience, or anger will prevent rather than hasten the adoption of the principles laid down; and failure immediately to apply the principles is not so much an indication of unwillingness or lack of cooperation as it is a sign of the pervasive strength of the emotional orientation.

WORRY

One of the most common forms of emotional thinking is "worry." To worry is to be in a state of anxiety about some particular problem. It is interesting to note that "worry" comes from the Middle English word "worowen," meaning "to strangle." Worry is never effectual, and persons *can* be trained to *think instead of to worry*. Worry is an emotional phenomenon wherein a problem is evaluated in the light of wishes and fears instead of objectively on the basis of the facts as they are. Anxiety is the prevailing state in worry, and is frequently associated with such physiologic evidences of muscle tension, as hypertension, hyperchlorhydria, spastic colitis, tachycardia, etc. Persons who worry are presumably confronted with some difficult problem which they are trying to solve. However, instead of reasoning out the problem, they "think about it emotionally" which is to say, they see the difficulties magnified through the eyes of fear, and what they see is vague, without perspective, distorted. Sometimes the problem is seen clearly, but

¹ *Vide* pp. 68; 475.

there is overconcern, *worry*, about the solution. To be worried generally means to be overcome by distressing emotion instead of reasoning out and working for the best solution.

It must again be stressed that the human inclination to worry is common. Even the making of practical decisions is "upsetting." We resent having to "make up our mind" when we are tired or absorbed in a task. Any situation which affects us adversely is disturbing, and naturally so; but the point which the patient must keep in mind is that the less effort he expends in fruitless worry, the more energy will he have for working out an adequate solution of his problem.

There are two types of worry, each of which needs different treatment. One type is that of the more or less "normal" person confronted by a difficult situation; the other and more common among the psychoneuroses, is that of the chronic worrier, to whom each event in life is a subject for "fretting and stewing," and who when he has no problems of his own of major importance, will grieve over the catastrophes in the home of a neighbor or friend.¹ In the first instance, the reasoning process is temporarily overcome by the emotional tone of the problem; in the chronic worrier's type, there are both a basic sense of insecurity and feelings of inferiority which need to be overcome before he can practice the "logical" process of thought.

It is well to outline arbitrarily several steps in reasoning out a problem. These steps are not sharply divided in real life, and they may be greatly modified by each person. Nevertheless, they form a concrete plan which the "worrier" can follow in overcoming his tendency to emotional thinking. *Primarily*, the subject must be taught that difficulties are best solved by reason (it seems almost too obvious to be said, yet it is a fact overlooked by these patients) and that the facts of the situation must be evaluated as they are and not obscured by possible dangers. Where dangers are real, it is not easy or even at times possible to remove all apprehension; but in the usual case, most of the apprehension is unnecessary. The subject must train himself *to state his problem clearly and definitely*; to put aside his fears and observe the situation objectively. What one desires may form the goal toward which one strives, but the actual working out of a solution must be impartial. Secondly, after the facts have been ascertained and weighed, *an analysis should be made of the possible solutions*. Some of these solutions are more desirable than others, but all the possibilities

¹ Cf. p. 77 (Identification).

must be faced as unemotionally as possible. The best solution available should then be followed with an understanding of its values and inadequacies. In the third place, it is most important from the point of view of avoiding worry to *resign one's self* to the difficulties of the "best solution," *until one can work out a better one*. The fact that a course of action has been planned and a decision taken leaves the person infinitely more stable and generally enables him eventually to bring about the most efficient solution of the pressing problem. Should the problem not require immediate solution, then one can continue to analyze it over a long period of time; but in such cases, continuous thought on the problem must be avoided, for continuous thought usually leads to a "rut formation" and the person overlooks possible answers because of an accustomed pattern of thinking. One should therefore consciously allow himself only a certain portion of time in which to examine the problem, and at other times deliberately occupy himself with unrelated interests so that the problem may not intrude. This free period with its "natural" and logical relationships, tends to make for a *general reorientation* which continues to apply when the pertinent matter is again taken up, and may bring about a more effective orientation there also. The absence of emotion leads to a clearer and more logical result.

Having determined his course of action, the patient must, in the fourth place, proceed to *carry it through even if it is distasteful*. The difficulties must be accepted unemotionally; that is, recognized as being distasteful and to be changed as soon as possible, but not permitted to be too disturbing. This is perhaps too ideal a condition to be more than approximated, but the combination of doing all that can be done while avoiding tension can, by self-training, be brought to a fairly high degree of success. It is far better to carry out that which is planned than to drift aimlessly in the sea of indecision. The physician needs to give much moral support to enable the patient to do that which is distasteful, until the patient learns the principle of doing the necessary but unpleasant things himself.

D. G., aged forty-two years, complained of dizziness, nausea and light-headedness. His company physician treated him but could find no organic pathology. Questioning brought out the information that two months prior to the onset of his symptoms the firm for which he had worked for twenty-two years had been amalgamated with a national institution. Less help was needed after the union of the firms and many of this man's associates had been discharged after long terms of employment. They were stranded without positions and untrained for any other kind of work. The patient believed that it would not be long before his discharge would occur. He felt

that his work was not altogether essential to the firm and one salary reduction had already been made. This man had saved very little, most of his earnings having gone into life insurance policies and for the education of his children. He was greatly worried over the future.

After an analysis of the situation, it developed that this man had his home paid for, and no outstanding debts. He was not at all certain that he would be discharged from his position. He had investigated a small road stand near his home which he believed might be profitably developed as a gasoline station as well as a restaurant. The possible solutions then to this man's problem seemed to be: first, to keep on with his work as long as he could and see whether he might not make himself more valuable to, and thus more secure in the firm; second, should there be any real evidence of being removed, to take over this road side stand, and see whether it could be developed. In the meantime he was (1) consciously to change the subject of his thoughts should they concern the difficulties in the office, and (2) at the same time, further investigate the new way of earning a living so that he could take it over if his office situation became bad, or if the prospects seemed brighter; third, he was to view the situation as objectively as possible; and fourth, stick to his decision. Finally, he was to develop new interests and hobbies both for the negative value of removing his thoughts from his problem, and for the positive worth of obtaining pleasure.

The patient, an intelligent executive, saw the value of the procedure, and put it into effect. When he understood the relationship between his symptoms and his worry, the symptoms cleared up almost immediately. He was given $\frac{1}{2}$ grain of phenobarbital to use whenever he felt tense, realizing of course that it was a "crutch" which he should discard as soon as he could stand on his own feet. A month later, he was still working at his position but had decided to make the best of it, since worry did no good. He had arranged for fewer expenditures so that he could save more, and he had "made a deal" to take over the "stand" at the end of several months.

This man under guidance had analyzed his situation and found it not so bad in fact as his fears had led him to believe. He made his plan of action, logically; decided which was the best course to pursue; and consciously learned not to think of the situation until he had some definite plan. He learned to "forget" his troubles. He did not thereby neglect his problem; but he "reasoned it out" instead of worrying. His new attitude did not mean that his situation was any less precarious, but it did mean that he dealt more efficiently with his situation. By following this procedure he rid himself of the emotional disturbance which had caused neurotic symptoms and which was both incapacitating and depressing.

The substitution of such a reasoning process for worry is not always so simple. Moreover, the type of reason suggested above did not emanate entirely from the physician. Rather the patient brought forth all the facts and suggestions, and under guidance synthesized his own ideas into a plan of action. Further, and this

fact is exceedingly important, the very making of a decision in itself relieved emotional tension. Many persons would welcome having a decision made for them, an unhealthful dependent attitude, if thereby they could for the time being be relieved of the responsibility of decision. The mere making of a decision is of great importance in removing emotional stress; and where possible, the patient should be taught how to think logically and come to his own decisions. In the beginning it may be necessary to coach the patient and often even to suggest solutions; but if the patient is at all intelligent and willing he will soon learn the technique himself.

Most psychoneurotic patients dread carrying out a line of action or thought, no matter how convinced they may be intellectually. The general attitude of emotional thinking makes for avoidance and fear of facts as they are. In strange contradiction to this timidity, these patients will often perform acts of martyr-like courage.¹ Closer analysis, however, will show that to the patient, the "courageous" act was less to be feared than are the imagined dangers of his conflicts.

Where the tendency to worry is chronic, however, there is need, in addition, to change the basic difficulty, which often lies in a basic emotional instability which must be corrected in the fashion outlined previously; that is, by determining the etiology, the existing stresses, and by treating the specific attitudes concerned. Often, persons who are chronic worriers have not learned to think rationally, and have always been emotional in the making of their decisions. In some instances there is a lack of emotional emancipation² from the home, and a feeling of dependence which has prevented thinking of an independent and logical nature. Whatever may be the basis of the *chronic worry*, *it must be primarily treated as one treats a neurosis* in order to bring about a readjustment.

N. T., aged twenty-two years, complained of nervousness, faintness, dizzy spells, heavy breathing, a pain up and down the breast bone, pounding of the heart at the least excitement, difficulty in breathing, and difficulty in swallowing. These symptoms had been present for six months, and continued unabated. "On December 26th, the night before leaving for a vacation, I was driving the car home. Suddenly I was seized by a terrible pounding of the heart, and I couldn't catch my breath. I felt I was going to die. These other symptoms have come on me since. I have taken all sorts of pills and some 'red medicine' but it made me doxy for a while and didn't stop my trouble." After several interviews, I learned that the boy, before leaving for his vacation, had been gambling and owed some money which he was to pay by borrowing from a loan company, the matter to be taken care of by a

¹ *Vide* p. 278.

² *Vide* p. 212 (Case G. J.).

friend of his in whom he did not have much confidence. Although this chain of events seemed to be the cause of his troubles it was difficult to believe that a full-grown young man could develop such a lasting neurosis from one difficulty of this kind. Closer analysis, together with interviewing the parents, brought to light the following. The father told of the boy's being a "mama's boy" and of his never having been allowed by the mother to "be on his own." In addition, the father told of always insisting that the "boy make something of himself" instead of going to school and playing football, which the father insisted was too dangerous a sport. The father was short tempered and irritable. He wanted his son, who worked in his store, to display more initiative and energy. The mother vehemently denied keeping the boy "tied to her apron strings" and insisted that he could go where he wished and do what he wished. "Of course, he is the kind of boy who always tells me just where he goes and what he does. He always wants me to buy his clothes for him, and he asks my advice whenever anything comes up that he's worried about." The boy's version (he was 6 feet tall and weighed 190 lbs. of solid muscle and bone) was somewhat different. "I guess I was always babied and spoiled. My father is high strung, and my mother always gets her own way. They always were afraid I'd make mistakes, and they'd tell me what to do and even what to say. They were afraid to let me play football because I'd be hurt, and I didn't want to be called a 'sissy.' If I go to buy a suit of clothes, Mother comes with me and she selects the color and the style, and talks about the price. At the store, Father watches me like a hawk. I guess he wants me to take his place eventually; but he's so anxious about everything I do, that I'm afraid to do anything. When I come into the store now, it is as if a cloud settles over me and I can't breathe. I want to do my own thinking for a change. That's why I started to 'play the ponies'; I got a thrill out of it at first; but now every time I think of it and what my parents would do to me if they found out, I shudder and my heart begins to pound. I guess it's because I've always been a worrier. I can't stand to owe anyone money, and I worry until it's paid. Every small thing which wasn't just right annoyed me and I worried about it. If a customer wasn't quite pleased, if I promised to do something and failed, if I had to hand in a theme in college and had little time to prepare it, if anything occurred in which I *might* not do the *right* thing, I worried."

This boy's symptoms, it becomes apparent, were the result of a life-long personality molding by an over-expectant father and a domineering mother who never permitted the boy to develop any security or any emotional satisfaction over his own decisions. His chronic worrying tendencies were the result of this life-long lack of emotional independence. A cure in this instance could be brought about only by changing the emotional independence of the boy on his parents.¹

First the situation as outlined above, was discussed with him, but in much greater detail; so that he had a thorough understanding of the mechanisms behind the formation of his symptoms. The

¹ Cf. p. 304 (Case N. T.).

next step was to outline a course of action whereby he could retrain himself. In this plan, he had to consider the facts that he still cared for his parents; that he owed them consideration and respect; but that he need not be obsequious or subservient to their wishes and demands. Moreover, he should proceed about this emancipation without rudeness or brusqueness; and there should be every courtesy and consideration. When he was given advice by his parents (or by anyone) he should evaluate the advice in the light of his own knowledge and experience, and with due consideration of the experience of the person giving the advice. Simply because advice is given is no reason that it must or should be accepted. But he must be sure that reasoning, and not just thinking emotionally determined the conclusion as to whether to accept the advice. Further, if he agreed with his parent, he should be courageous enough to say, "You're right" and follow the suggestion. Should he reason to a different conclusion, his response should be something of this sort, "I follow your reasoning, Mother; but it seems to me that my particular reason is more applicable to the situation, and I will therefore do it thus and so." In this particular case, the patient had further to be told that he should not attempt to carry out his point by being emotional nor, on the other hand, should he feel it necessary to do what they said, merely because it was his parent's advice. He was shown that *extremes even in reasoning are dangerous*, for often what at the time appears to be a good reason, may at another time seem foolish. Moreover, the quality of emotional tone must be considered, and due weight given to parental desire. It was a question of learning just when to be firm and when not to be, that it is just as bad to have too much salt in food as to have none at all. The principle, however, underlying the making of all decisions was to be that of unemotional and logical thinking, which the boy was to do for himself..

In addition, all the ordinary tasks which the usual man of twenty-two years does for himself and which this boy's mother had done for him, were to be his sole responsibility. He was to buy his own clothes, make his own decisions, avoid asking for advice on the trivia of his life, avoid telling his parents every little difficulty that arose, etc. In other words, he was to learn to be self-reliant, but without discourtesy to or disregard of his parents. His father and mother were spoken to and they too saw the value of letting the boy make his own mistakes in order that he might develop self-reliance. At first this new order was irritating to them but soon their son seemed actually more affectionate to them since his affec-

tion was the understanding one of an adult and not the neurotic one of a dependent child. The chronic worry tendency disappeared as the boy learned to make his decisions and to carry them out without being upset.

EMOTIONAL EMANCIPATION

One especial kind of emotional thinking, of immature attitude, is found in those patients whose major difficulties appear to stem from their over-dependence upon or attachment to their families.

Attachment to members of the family is "normal" and desirable. The constant association breeds a community of interests and a common bond of affection which "makes blood thicker than water." Many times, however, among psychoneurotic patients, this family dependence is excessive. As a matter of fact, *most of the psychoneurotic actions do not appear as generically different from what is average, but as an over-intensification of the average reaction.*

Many young men and women have psychoneurotic problems, the basis of which is an excessive attachment to their parents. This attachment is in the form of a neurotic love, differing from the normal in that it is so excessive that it calls forth the other extreme (see ambivalent)¹ of dislike for the same parent, and develops in the child a feeling of inadequacy which is compensated for by an attempt to find all satisfactions in terms of this "neurotic love," which from its very nature inevitably must yield more disturbance than it does pleasure.

Every growing thing once reaching maturity desires to be independent. When the child is young much maternal attention may definitely be overwhelming, but especially after puberty such excess of attention makes the child feel increasingly irritable. On the one hand, he "feels" that he owes allegiance and love to recompense the mother and father for all their effort; and on the other, he feels resentment at not being able to do things completely as he wishes. If the child has managed to preserve his "will to be independent," then even though his actions may be self-determined, there often lurks in his feelings a sense of being an ingrate or of being disloyal. If there is no conflict between the desire for independence and parental domination, then psychoneurotic symptoms rarely occur unless by some fortuitous chance the child (he may be chronologically an adult) is bereft of the parent, or other member of the family on whom he has learned to lean for support. Even if there

¹ *Vide* p. 80.

is no conflict with resultant neuroses, the person so smothered with affection, so trained in over-dependence, never can reach full maturity, never can become a self-reliant, integrated personality.

In such situations the parent is usually at fault. He wishes the undivided attention and devotion of the child as recompense for all the "sacrifice" made in rearing the child; or, equally often, the child becomes a substitute for direct emotional satisfaction which the parent has missed in his own personal life.

The problem of teaching parents to be "normal" in their attitude toward their children is a delicate one, insomuch as success is dependent upon the parent's having not only a genuine love for the child, and respect for him as a personality with certain "inalienable rights" but at the same time a sense of proportion which will prevent him from going to the other extreme of expecting too much self-reliance, too much independence from the child. If too much attention leads to lack of self-reliance, too little may equally lead to emotional insecurity. Rarely is a child spoiled by being loved "too much" if at the same time he is taught to be self-reliant, come to his own conclusions, make his own mistakes and profit by them, etc.

In the individual case where the psychoneurotic symptoms are clearly based on this over-attachment,¹ the patient must be urged to follow a "golden mean" course of action. Even though he is urged to think for himself, he is cautioned to listen carefully to parental advice and to weigh it on its soundness and applicability. To refuse to follow a certain course merely because it is recommended by a particular person is as indicative of lack of maturity and independence as is the opposite extreme. Parents, on the other hand, should be urged not to be overly concerned when their children disagree with them, for as long as a child is reasoning his way to a conclusion, he will learn far more from a single experience of his own than he would from any amount of verbal instruction.² One very wise mother commented, "I wonder why my boys are so good about listening to and accepting my decisions, when so often their judgment about their own affairs is better than mine."

When children grow up they must assume the responsibilities of independent human beings living their own lives, suffering their own sorrows, experiencing their own joys. To expect the child to be constantly or even primarily interested in the parents is expecting the abnormal. When children reach maturity (a state which is reached gradually and through training and experience; not

¹ *Vide* p. 189 (Case S. I.).

² *Vide* p. 207.

automatically by attaining a certain chronological age), parents should turn much of their attention to interests and pleasures which they personally derive from life and which they should have been cultivating all along. Not only are the parents themselves happier, but thereby they both set an example of happiness and permit their children the freedom which is essential for the development of self-reliance.

Among the attitudes most essential for the development of a mature and integrated personality are: (1) self-tolerance, (2) the ability objectively to evaluate one's liabilities and assets, and (3) the will honestly and intellectually to face difficulties. One realizes at once upon reading such an enumeration that *these attitudes are not separate entities*¹ but rather different aspects of the same quality—the ability to face reality objectively, dispassionately, unemotionally.

SELF-TOLERANCE

It is a common experience for "normals" (*i. e.*, persons who have infrequent psychoneurotic disturbances) to find satisfaction with what they themselves do, and dissatisfaction with what others do. However, most psychoneurotic patients are intolerant alike of their own and others' inadequacies and manifest their feelings by compensatory mechanisms, rationalization, emotional thinking, irritability, or by an admitted sense of inferiority.

The difficulty with such persons lies in the fact that they fail adequately to understand and therefore to make allowances for "human nature." The French proverb, "Tout comprendre, c'est, tout pardonner" is applicable in this connection.

These patients have standards (usually inculcated by the environment) which tend to condemn as "sinful" all "normal" wishes and desires and which demand a level of behavior impossible of attainment. Their fears and wishes are based not on facts as they exist but, rather, are an outgrowth of a distorted sense of their abilities and values. These persons feel they are not so "smart" as others, they are not so "good" as others, that the particular task they are engaged in is not being so efficiently done as others would do it, etc. Any desire for sex satisfaction, for money, for fame, is looked upon by the patient as being "sinful," forbidden, "untouchable," reprehensible, and is surrounded by emotions connoting dread. When they perform some task and fail, they berate them-

¹ For example: Case N. T. (p. 200) which illustrates the tendency to worry may well illustrate, also, the lack of emotional emancipation.

selves; and if they accomplish something well, they find reasons for feeling that they might have done it better.

These persons who are intolerant of themselves often develop a compensatory attitude of intolerance of others. It is very common to find that persons who are over-bearing, over-certain, almost offensive in manner, are underneath shy, sensitive, and fearful of their own inadequacies. Frequently they will criticise harshly in others the very faults which they themselves display.¹

Mr. T. C. stopped by the office one day. "I just noticed you talking to K. T. Is he a friend of yours? I can't stand him; he has the crudest manners and is rude and impolite. He has no social sense and his clothes are atrocious."

It was somewhat amazing to hear Mr. T. C. make this statement inasmuch as K. T. had, a few minutes earlier, used almost the exact words to describe Mr. T. C.'s behavior!

This attitude of intolerance of themselves and intolerance of others (the second is generally the result of the first) can disappear only when the patient learns to *understand*. "Understanding" for the psychoneurotic patients suffering from this difficulty means recognizing that the body and bodily desires are normal; that ambitions and desires are in themselves not wrong; that to desire sex contacts, to wish to be wealthy and powerful, to aspire for recognition is neither abnormal nor "wrong." In anger, for example, it is not "wrong" to wish to destroy one's enemy.

Children in a momentary heat of rage say: "I wish he were dead"; and many of the early folk songs give similar direct expressions of hatred—primitive expression of a primitive emotion. In like fashion, the adult who wishes to destroy his enemy is neither a "sinner" nor a "criminal"; he is merely a partially civilized person (as are all others of the human race) who has momentarily slipped back to a more primitive level of thinking. The psychoneurotic patient who is troubled by his guilty conscience and a fear of killing, needs to be reassured that his feelings while not mature are not wicked; and more particularly he needs to be trained to raise his whole pattern of reactions from a childish and immature level. Similarly the person who has violated the sex code and consequently suffers from a sense of sin or guilt needs to be taught both that his desires and impulses are part of his basic nature, and that the code has value for society as a whole, of which he is a member

¹ One might suggest the rule that he who denounces vehemently some trait in another, frequently suffers from that same trait himself.

with certain obligations and responsibilities. It is interesting to notice that patients suffer as much from what they wish, from their "wicked thoughts and desires" as they do from any overt acts which they may have committed.

We need to recognize that our social order demands that we discipline ourselves so that our desires are controlled.¹ The specific manner which is decreed by society varies in different lands and in different ages, and as a consequence what is wrong at one time or place is right in another. If the patient can learn to understand this fact and realize that *though the desire is not wrong, the action may be*, much suffering will be alleviated. In the usual situation, comprehension of this fact results in the disappearance of the desire; whereas the guilt feelings attached to having the desire make the desire continue. Once a patient understands, for example, that it is neither harmful nor sinful to masturbate, and that most men and even animals practice masturbation, the drive and practice actually decreases. It is a common rule: *repression makes for increased intensity of that which is repressed*. It is necessary to be tolerant not only of the impulses and desires so characteristic of the human race but of individual limitations as well. When one understands what he is capable of at a given time, he will cease his bitter self reproaches for not achieving more and will turn his hitherto wasted energy toward increasing his capacities, improving his skill, developing his abilities. Mistakes and failures are not sins; they are indeed essential in life's learning process, training being largely a matter of making a series of mistakes until one can become skillful enough to overcome them. The very fact that a person makes mistakes may indicate that he is directing his efforts toward a goal.

LIABILITIES AND ASSETS

It is well for the person to know (realistically not fatalistically)² what are his special abilities and his particular limitations. In the psychoneuroses there is too great a tendency to desire aimlessly and widely, with consequent feelings of constant depression and irritation at not obtaining these unformulated desires, or of equally constant dissatisfaction if they are obtained. Conversely and as a corollary, these same persons expect of themselves that which is manifestly impossible either because of lack of training or because of native inability. If one wishes to achieve a particular goal and at the same time escape the disintegrating effect of inde-

¹ Vide p. 122.

² Vide p. 185.

cisiveness, it is essential that he formulate in concrete form just what it is that he wishes,¹ and then evaluate accurately and objectively his limitations and his positive potentialities. The futility of attempting or wishing the impossible is no more tragic than the conscious or unconscious failure to achieve the possible. Happiness and efficiency are achieved not by resignation to a typically Oriental fatalism, on the one hand; or on the other, by grim adherence to the ultra aggressiveness so characteristic of the West.

Understanding one's limitations does not mean a passive acceptance of them. Rather, it means recognition of the problem, such recognition to be followed by working out a technique of temporary resignation and compensation.

The physician need not be too concerned with what the individual patient desires, for that is entirely in his own realm. He may wish to become President or to be the greatest scientist in the world, or to be the richest potentate in existence. If he has healthy ways of thinking, understands what his desires are, and plans to overcome his limitations, he has desirable mental hygiene. If, on the other hand, he has vague day dreams and struggles aimlessly, wishing beyond what is possible at the moment, and making no effort to accomplish what he wishes, then he would generally tend to remain an inadequate personality, and potentially if not actually, a psychoneurotic patient.

FACING DIFFICULTIES

In a world so constituted as ours is, both physically and socially, there is no possibility of a person's escaping all difficulties. If, "One takes the trouble to be born," it is into a world wherein there are many barriers, stumbling blocks and hurdles, not all of which can be managed with ease and success. It is a "mixed world" and must be so accepted; and more important, dealt with. Rarely does one find a person overwhelmed by his joy, seeking an explanation of his good fortune. One of the most difficult tasks man must perform is to learn "to see life and see it whole"; face difficulties as they arise; deal with them as adequately as the limitations of his ability and the nature of the situation permit; and adjust himself to those conditions which he is powerless to change. Two dangers which are equally to be avoided are: on the one hand, the easy fatalism which adopts the attitude of "What's the use? This is the way it is and there is no use in trying to change it," and on the

¹ *Vide* p. 246.

other, a refusal to face irritating and disturbing facts, which refusal brings in its train the host of psychoneurotic symptoms so commonly observed. It must then be remembered that the insistence on the necessity of resolutely "facing difficulties" means neither a blind nor a martyr-like acceptance of them as inescapable, but rather an honest and objective evaluation of specific problems, a calm, unemotional, a "thought-out" not a "felt-about" plan as to what can be done. In actuality there are relatively few situations which cannot be at least ameliorated, if thus "intellectually" handled.

Even in those instances where "nothing can be done," the person can be trained deliberately to refuse to be disturbed by that which he is powerless to change. He must learn not only to understand the cause of his troubles but consciously and consistently to practice the attitude of refusing to be emotionally "wrought up" by truly inescapable and irremedial circumstances. Here, as elsewhere, the element of time is important, for rarely can attitudes be successfully applied the first few times they are called into play. Habits are formed only by repetition, and the habit of objectively facing difficulties is no exception to the rule. On occasion the patient can find great relief by some recreational outlet which releases the tension built up by his acceptance of the difficulty.¹

Miss C. O., aged forty-three years, who had detachment of the retina in both eyes, had very little vision, and saw only large objects in the light. She was referred by her nephew, because of her paranoid ideas. She felt that her sister with whom she lived was playing tricks on her, that her vision was poor but not bad, and that she was being taken advantage of. She was sure that her food was poisoned, and that everyone was intent on taking advantage of her. Her paranoid ideas became systematized into a regular delusional system.

When she was spoken to she vehemently denied that she was practically blind, or that her poor vision interfered with her activity (she could hardly move about the house without feeling her way). She was ready to "flounce" out of the office the moment it was suggested that she learn Braille. "I'm not blind. What are you trying to do to me?" She refused to admit to herself how severe her ailment was and she tried to go about the house by memorizing the position of the furniture. Her paranoid ideas continued, and it was finally decided to hospitalize her for therapy. Through a friend she became acquainted with a totally blind man five years her senior; and she immediately took charge of him, tended to his wants, leading him about gropingly but surely. Almost immediately her paranoid ideas disappeared, and for the past few years she has been quite happy, going with him "as a companion" to the home for the blind.

¹ *Ibid.* p. 253.

This woman found an outlet for her emotions by "proving" she could lead the blind and not need to be led. The torture caused by doubts of her adequacy was relieved, and there was no necessity for such compensatory explanations to herself as had been expressed in the paranoid ideas. Her compensation was, however, a precarious one, since there remained the basic refusal to recognize her inadequacy and make the best of it. Should the new balance which she established break down in some way, her symptoms would recur. The psychotherapeutic formulation should have been directed toward persuading the woman to understand her condition, face it directly, and do what was best under the circumstances.

The frequency with which psychoneurotic patients avoid facing the issue is an indication of the basic attitude of trying to avoid danger by denying its existence. This attempt proves a boomerang however, for the memory of the danger continues to exist "sub-consciously," and then assumes a shroud of imagined danger in addition to the real danger, so that the situation has greater fear producing potency than it would if examined consciously and frankly. In general, that which is not clearly defined tends to carry with it a halo of vague wishes if it is pleasant, and a shadow of disconcerting fears if it is unpleasant. Situations which are anticipated¹ often are not so pleasant nor so bad in actuality; for the imagination surrounds the situation with qualities and emotional tones that do not actually exist. Music² is so powerful and moving, because it permits each person to clothe the harmonious tones with his own connotations, associations, and emotional tones, thus enhancing the effects. This fact accounts for the various meanings a single musical composition may have, depending on the "hearer." Similarly, if one anticipates some irritation or danger, the more the anticipation and the more the tendency to avoid meeting up with the actual circumstances, the more will the danger be clothed with a fog of fears and disconcerting possibilities. Accordingly, it is most important for the patient to face the facts as they are, see clearly the outlines of the undesired irritations, and understand *without disturbed feelings* how much actual harm can be produced. Such understanding in itself often removes fear. It is common experience to be at a swimming pool and stand on the edge, hesitant about diving in, because the water looks so cold; only to find it pleasant when one has taken the plunge. Miss C. O. denied any suggestion of blindness because of its dreaded connotations; and had to develop some sort of "reasoning" (para-

¹ *Vide* p. 82.

² *Vide* p. 253.

noid) to justify her failure to adjust. Persons who are deaf, and particularly those who are partially deaf, frequently develop paranoid symptoms because they refuse to accept the fact of their deafness,¹ and insist that when they cannot hear what is said, it must be because people are whispering something, and that they are whispering because what is said is detrimental to the patient. Such cases are so frequent as to warrant the term "psychosis of the deaf," and the therapy lies in early training of the subject to face this deafness and to resign himself to it when he cannot hear what he wishes. The use of hearing aids and lip reading is to be greatly encouraged, but equally important is it for the person to cultivate the attitude of understanding and being patient with his disability.

In many instances, however, the stress or precipitating factor lies not in obvious difficulties such as physical or financial disability, but in more subtle ones which concern one's pride and ego and which may cause far more intense suffering than does actual physical distress.² Social estrangement, ostracism, contempt, lack of appreciation, even the difference of being unusually thin or fat or short or tall may exert a pressure which will result in the warping of the personality. These differences need to be faced, understood, and dealt with unemotionally, else there will be improper orientation which may lead to neuroses. Ambitions which are unsatisfied, desires which cannot be obtained, fears which cannot be eradicated form a more potent disturbing force than the cruder and more obvious physical or financial forces. Cure of the neuroses caused by these subtler forces is often more difficult to achieve than is a remedy for actual stress.

Mr. K. M.,³ aged thirty-four years, entered the most violent of physical encounters and most dangerous of physical enterprises. He was afraid, very afraid of all these physical encounters, but he forced himself into them because as a child he had been called "yellow" and he could never overcome the fear that he really was a coward. He could not face the fact that fear is a natural human quality and that to be ashamed of it is unnecessary. He tried to compensate by proving to himself that he could do anything that he feared. He had to learn that courage means the overcoming of fear, and not the absence of it. He learned to tolerate and face this fact, knowing that if a situation arose in which courage was necessary, he would not fail. Constantly trying to prove an absence of fear merely emphasized its presence. His nightmares were so bad that he did not go to sleep till late, in an effort to have so little sleep that there would be little time for nightmares. As he grew more tolerant of himself and, in an objective manner, faced his inadequacies as well as his capacities, these terrifying dreams lost their major causative factor, and in time ceased to trouble him.

¹ *Vide* pp. 97; 324.

² *Vide* p. 159.

³ *Vide* p. 263.

Similarly there are innumerable persons suffering tortures, self-produced because the intensity of their inhibitions, and their failure to tolerate the inadequacies of their human nature cause an intense feeling of inferiority.

Miss G. J., aged twenty-seven years, who earned her livelihood as a legal stenographer, experienced intense fear whenever she had to leave the security of her own home, and could not "take dictation" from an employer without bursting into tears. She suffered from sudden attacks of diarrhea, from sudden and impelling desire to urinate, from spells of suffocation. If she left the house and walked down the street, such intense fear would seize her that she would have to sit down on the curb, straining herself with all her power to prevent a bowel evacuation. Psoriasis had been particularly bad for many years. Physical examination revealed nothing. The intestinal tract and bladder examinations were negative, bacteriologically, roentgenologically, and cystoscopically.

This patient lived with her elder sister, and contributed to her support. Nevertheless this elder sister took it upon herself to nag, belittle, and generally make life miserable for the patient (probably as a compensatory mechanism for having to accept financial support). When the patient was asked why she continued to live with her sister, she unfolded a long story of family domination. From early childhood she had been restrained and restricted. She was not allowed to go out evenings because her father "would have no child of his running loose on the street." She was not permitted to go to the motion pictures because they were "lewd" and "sinful." She had to follow without question the commands given by her father who even when everything was done as he had ordered, would scold and berate her. He prided himself on being a good disciplinarian, and felt virtuous and "progressive" for having sent the patient through high school. In his own way he felt that he cared for his daughter, and she in turn believed she owed allegiance to him. Her entire attitude toward life was one of fear, of trying to please the members of the family, of fear of what other persons might think of her, in a word, intense insecurity. She was inhibited in every way, inhibited because the constant undercurrent of fear prevented her from doing anything. She was constantly unhappy, having few girl friends and fewer boy friends. She was inadequate, felt inferior, "knew she was worthless," and in general tortured herself with doubts and self-reproach. She was sure she did her work poorly, that the neighboring girl was more efficient, that she was "dumb and ignorant," and that she never could amount to much.

In the office where she worked, there was a woman's lavatory adjacent to the office manager's desk, and when she would pass by his desk, she felt that he looked at her with a leering and insulting expression. As a result she restrained herself constantly from going to the lavatory. One day this man came to her desk to dictate to her, and she was seized with an intense desire to urinate; and felt so intensely ashamed that she left the office immediately. Soon thereafter the other symptoms developed.

To treat her fear of crowds, of streets, and her spastic contractions of smooth musculature, it was necessary to modify her funda-

mental fears and inhibitions. It was important to get the patient to face the actual facts as they occurred and teach her not to be afraid. Her early life was discussed in detail, and the development of her fearful condition carefully analyzed. She came to realize for herself that her family attachment was more one of fear than of love, and she learned to trace to its original source each item involving intense fear or failure to do what she wished. Very gradually her attitude began to change. Each day she went out a little from her house, going until she felt fearful and then returning; she invited persons to her home with increasing frequency. Very gradually she improved until she could take a bus downtown, but it took several trips before she could alight from it. She secured a position and worked as a file clerk, and at the end of the second year of treatment she was able to resume her position as a legal stenographer. At the end of treatment she had few fears left; looked at life with relative objectivity and with the philosophy that she could always take care of herself financially, that she was not dependent upon her family in any way, and need not be disturbed by what they thought or said, that her limitations were in no sense peculiar to her alone; in other words, she had learned to have self-tolerance and understanding of others. Her psychoneurotic symptoms disappeared completely; and, coincidentally, the psoriasis also cleared up.

Mrs. S. O., aged twenty-nine years, complained of irritability, emotional instability, insomnia, temper outbursts, and depression.

"Inside I boil. When new problems arise, I flare up like a fire cracker and shoot off my big mouth. I get upset over the least little thing. I guess I mind everyone else's business. I've always worried over everyone since I was a kid. My mother was very cold natured and she never showed any affection to us kids; and I guess I'm trying to be different from her.

"I'm always in a hurry. Just can't sit still. I'm not satisfied with anything. I've always wanted an education but never got past fifth grade, when I had to go out and help support the family.

"As a child I was always sickly, but I never got any attention, or any of the things I wanted. I was always nervous, and felt I wasn't as good as other persons, I was so nervous that I was kept out of school and then when Pat was a couple of grades ahead of me I was jealous. When I grew older I wouldn't let a fellow touch me—I was afraid of what people would say. As a child I saw a fellow grab Eloise and try to make her sit on his lap. She refused and I thought it was wonderful to be like her."

This girl's life was one full of frustration.¹ One can readily understand how such a background can contribute to such a per-

¹ *Vide* p. 46.

sonality. However, in adulthood, this girl continued to live and feel as she had in childhood, but unnecessarily so. She could be trained to face her past and present experiences in an objective and unemotional manner. She was told that unquestionably her past was unfortunate, and difficult, and that she should try to avoid the same mistakes in rearing her own child. Nevertheless, since she could not "unlive" the past she had to accept it as it was and admit its reality without "bringing herself to a boil" every time she thought of it. Then she needed to list her assets and liabilities. She felt on the one hand, that she was uncultured and uneducated. She was emotional and envious and expressed herself loudly whenever she was displeased (which was most of the time). On the other hand she had insight into her condition, knew how it developed, and understood her own peculiarities. It was time to put aside all "feelings" about the wrongs in the situation and do something about them. She finished her housework early and had spare time. She was to write to a public school extension course and start studying to finish her grammar school education. In addition, she was to cultivate the acquaintance of several of her neighbors who she knew often went on educational excursions to the museums, to lectures, etc. She was to watch her conduct in specific detail (and her actions were specifically discussed) and make deliberate efforts to follow another pattern of behavior. In short, by conscious effort she learned to understand and not be emotional about the unfortunate past and to do something constructive about the present. This patient was seen twice a week for a month and then once a month for six visits. At the end of that time her brother remarked that his sister "had a new personality." There was nothing seriously wrong with this woman that could not be corrected with patience and consistent effort.

Among the immature attitudes which make difficult the attainment of self-tolerance, true self-evaluation, and the ability objectively to face difficulties are those of: (1) rigidity; (2) resentment; and (3) over-emphasis on the opinions of others.

RIGIDITY OF PERSONALITY

Rigidity in personality is manifested by the tendency to be intensely disturbed by any deviation from accustomed routine. Persons so characterized have either accepted from their environment or have laid out for themselves a fixed pattern of reaction and ideas, a pattern so crystallized that any break or modification

forced on it by the environment is met with more or less violent resistance and emotional upset. Here, as elsewhere, the physician is concerned not with "absolutes" but with matters of relative degree. As was pointed out in Chapter II,¹ it is desirable that much of life be routinized for the conservation of energy; but it is equally important to remember that any virtue carried to excess takes on the nature of a vice. Whether the habits of a person are a help or a hindrance will be determined largely by his attitude toward them. If he finds it more convenient to do things in a particular fashion, more efficient to follow a specific routine, well and good; if, however, he becomes explosive, irritable, excessively disturbed when his routine is disturbed, then obviously the end—effectual living—is being sacrificed for the means. Habits, if they are to be valuable, must be flexible.

Indeed, the essential difference between a human being and a highly complicated Robot lies in this very flexibility. At a recent exhibit, there was a mechanical contrivance that could play and win at checkers, *if* the right counter moves were always made, but which failed when unexpected moves were made. Although the nervous system has been likened to a central switchboard with many telephone extensions, the human differs radically in that it is flexible and adaptable. When persons become rigid, their response becomes as predictable as the telephone system, and furnishing certain combination of stimuli will produce a predictable response. Such a person, in spite of the efficiency or ingenuity he may display in his vocation, having become an automaton in effect, has, to that degree, adjusted on an inferior level.

Patients who are overly automatic and irritated when this automaticity is disturbed should be educated to increase their plasticity. Some patients on hearing such advice tend to go to the opposite extreme and deliberately do everything in a vacillating manner, thereby indicating that they have failed to realize that the goal is to avoid extremes in anything.

Mr. D. I., aged fifty-three years, a successful business man, complained of intense fatigue and dizzy spells. No physical basis for his condition could be found. He was sent on a Caribbean cruise for six months, but came back worse than ever. He perspired freely and when he went into a restaurant grew so hot and short of breath that he had to get up and leave quickly. He was depressed and suffered from insomnia.

He was normally a pleasant person who got along well with others. However, his entire life was carefully routinized even to the most minute detail. He was married and had three children, who, when they grew into

¹ *Vide* pp. 48; 275.

adulthood, revolted against the systematic way he attempted to routinize them. When his wife died, his manner of living, of necessity, had to change; and gradually he went into this depression, and became increasingly irritable with no specific precipitating factor other than the fact that he could not endure living in a world different from one routinized in a certain way. In addition to this severe neurosis, he developed many hatreds for persons who differed from him. Psychotherapy consisted of discussing his problems with him; and since he was an intelligent man, he could understand the paralyzing quality of his rigidity. He was trained to be more plastic, to consider other and apparently alien points of view, to avoid doing the same things in the same manner day in and day out. This man who had not worked for two years, went back in his office after two weeks, and with the aid of persistent training, underwent enough of a change of personality to make his friends remark on his new manners of living. It took many weeks of discussions and urging however, to get him to change his life-long habit patterns.

The deleterious effects of an iron-clad code are even greater if the rigidity is of ideas or ethical theories rather than of the minutiae of daily life. In the first place, other persons will "give in" more easily on scores which they consider unimportant; *i. e.*, they will indulge the whims of the rigid personality. On the other hand, most of our concepts which we like to label "ideas and ideals" are not intellectually arrived at and scientifically held convictions, but rather inherited and emotionally retained "certainties." The very "taken for granted to be true" quality of codes makes them resistant to displacement or modification.

ATTITUDE OF RESENTMENT

When persons are frustrated, when an endeavor does not succeed, when a desire is not fulfilled, there tend to result anger and irritability. This attitude is natural and "normal." In the average "healthy" person, such anger and irritability disappear shortly, forgotten in the activity of new events and problems. In many psychoneurotic patients, however, the failure to obtain that which is desired leads to the establishment of grudges and continuous anger. This attitude may be a general one and assumed toward all frustrations, with the result, since daily life is far from being continuously flattering or wholly satisfactory to the average person, that myriads of animosities remain within the person rendering him and all those about him unhappy, creating that chilled anger and fear called hate, or that self-abuse termed "feelings of inferiority," which, in turn, result in hypertension, insomnia, digestive disturbances, etc.

It is necessary, accordingly, to teach most of these patients not only the deleterious effects of resentment, but also a technique for overcoming it. The subject must be discussed in detail so that the patient can see the rationale and logic thereof. Then the patient must be told that whenever he is disappointed he must consciously force himself to think the situation over objectively and understand it dispassionately. This attitude can be adopted, but it takes time. It is a common experience in the psychiatrist's office to hear some such statement as, "I'm not so easily bothered when things go wrong, anymore." At first, the patient will be able to apply this attitude only partially; but later on *if conscious training by the patient persists*, this attitude will become automatic.

Understanding a situation and being dispassionate about one's failure to achieve a desired goal, do not mean that the patient should assume an attitude of "That's the way it is, and nothing can be done about it."¹ Such an attitude would in the end make for a smug, unprogressive, and ultimately self-injurious condition. On the contrary, the patient should plan and work as much as possible to change the irritating situation, but always in an understanding manner and with a minimum expenditure of emotion, since emotion tends to interfere with the reasoning process,² hinders success, and makes for an unhealthy condition. The very fact that the patient is assuming the *active* role of *doing* something to change the situation, rather than the passive one of accepting the status quo, helps him remove his disturbing and neurosis producing memory of past injuries and disappointments.

There are some patients who are "born lazy" and it would be better for them if irritations were added rather than removed. The physician must use his judgment³ in each individual case. In few situations, however, should emotion be permitted to interfere with the thinking process, as it does in worry, resentment, etc.

WHAT OTHERS THINK

Social pressure results from the influence of the prevailing ideas in the community on its members. This factor of social control is one of the most important in keeping a social order stable, and makes for community of interests. A certain percentage of the human race always will tend to have the opposite opinions to those prevailing in the group; and such *differences are necessary and*

¹ Vide p. 208 ff.

² Vide p. 197 ff.

³ Vide p. 134.

healthy for the homeostasis¹ of civilization. However, in the psychoneuroses there is a tendency to be too much influenced by this "community" ideal. Many such persons will vacillate and hesitate in their decisions which may be entirely correct both from a personal and social point of view, merely because they feel that others may not think well of them. Miss S. G.² did not wish to be seen with the man for whom she cared greatly, because she was ashamed of what others would think of his "ugliness" and his short stature. One "southern lady" told me that as a young woman, if she ever had occasion to launder some small article, she would hang it in the attic to dry, because the neighbors would be shocked if they saw her doing anything so "unladylike" as washing clothes.

In these instances, there is an over-evaluation of what others think and an insufficient courage to carry out what the person thinks. Such a lack of belief in the validity of one's own opinions often connotes a feeling of inferiority and a lack of balance. Also in many instances it is the result of lack of emotional emancipation and the consequent lack of training in self-reliance.³ Again, this fear of the opinion of others may be directed in a single direction, the person being overly conscious, for example, of what his "hero" or "ideal" would like him to do.⁴ Here, once more, the task is to bring the person back to the normal line of doing that which he considers right, as long as he does not violate too strongly the existing social code. There is no sharp boundary that can be drawn, and only common sense can decide the correct attitude in any given situation.

WISHING TO REMAIN ILL

It is a strange paradox to find many patients suffering from psychoneurotic difficulties who seemingly wish to remain ill, despite the fact that they come for treatment. Patients frequently come to a physician and after complaining of some ailment, make their own diagnoses, and even tell what they wish prescribed. These persons come merely to obtain official sanction for one or more of their vague emotional wishes. They tend to refuse to admit the trouble lies where the physician indicates, and insist that it is somewhere else. Particularly is this attitude true in the psychoneuroses, the patient refusing to recognize his personality diffi-

¹ Homeostasis is a word coined by Dr. Cannon to signify the constant play of opposite forces within the human body, in such a way as to maintain a healthy and functioning balance between the constantly present extremes.

² *Vide* p. 184.

³ *Vide* p. 205.

⁴ *Vide* p. 77.

culties, or if he does recognize them, seemingly preferring to remain ill rather than try to do something about them.

One of the most important points in psychotherapy is to make the patient not only see his problems but *wish* to change.¹ Patient after patient will in one breath admit that he has been too concerned about some incident or some method of living, and then in the next breath insist that he wishes to continue to act and feel the same way. Once the patient has changed his attitude so that he is willing to try to correct his difficulty, the rest is a matter of time and practice.

It has been a matter of personal amusement to have patients come in after several psychotherapeutic discussions with the statement "I'm *afraid* I'm better, Doctor."

UNDERSTANDING SYMPTOMS²

Very early in the therapy the patient should learn the real significance of his symptoms and the consequent necessity of treating not the symptoms but the causes lying behind them. It must be pointed out that whatever may be the organic basis for the symptoms it is so slight as to be incapable of producing the symptoms described by the patient. The patient is told that although the symptoms are real, the basis for them lies in the spastic condition of the blood vessels, in the heightened irritability of nerve centers, etc. Such an explanation³ while not wholly accurate, scientifically speaking, serves to give the patient a better comprehension of his pain or complaint. Patients dread being told there is no cause for their symptoms; and lacking understanding of how emotion could possibly mediate pain or physical aches, they often refuse to accept medical *ex cathedra* statements. When the physician diagrammatically puts forth a possible connection between the way the patient feels and the symptom, acceptance is far easier both because "it makes sense" and because it is less wounding to the false pride built up by so many persons.

Subsequent to such an explanation, when the symptom reappears, as it inevitably will until the fundamental cause is dealt with, the patient must be trained to think to himself: "I know I feel this pain; but this pain in turn is caused by this and this problem of mine and is in itself an indication that the problem is getting the better of me. I must shift my thoughts from this pain, and think again about the problem in such a way that I can solve it."

¹ *Vide* p. 186.

² *Vide* p. 181.

³ *Vide* p. 179.

Patients do learn to think in this way; and the understanding implicit in such thinking makes for disappearance of the pain.

MORAL SUPPORT AND ABILITY TO CARRY RESPONSIBILITY

Though no human being is wholly self-sufficient, the need for self-reliance stressed in these chapters is essential for the optimum operation of the human personality under changing conditions of existence. The number of restrictions to which we as civilized persons must assent in order to have the rewards of a civilization are not always easy to accept; and so society arrogates the right to discipline the individual man. Such discipline presupposes that man cannot control and guide himself and needs always the fear of punishment from without. This assumption is true as long as the person has not learned a *self-discipline*¹ which avoids both *capricious self-indulgence and rigid self-intolerance*. Only when this self-discipline is reached can man govern himself, singly or collectively; otherwise he needs external governing. Care must be taken, however, that self-discipline be not confused with asceticism, but rather be based on a tolerant understanding of the basic drives of all living organisms, and a reasoned control of such drives.

Complete self-reliance is rarely possible, man being so constituted that some moral support is necessary. This moral support is found by many in religion, in idealisms, in the approval of their fellow men. However, under conditions of stress the ordinary supports may be insufficient; and the person, particularly if he is so disturbed as to develop psychoneurotic symptoms, needs help which is direct and personal. Marriage, for example, can sustain a person through stress which would ordinarily "crack" him. When the wife and husband "understand" each other, their mutual aid is not only sustaining, but energizing.

The physician who listens to the patient's difficulties and is directly interested and encouraging, can provide the moral support which the patient needs to enable him to clear the hurdles before him. The physician by his sympathetic manner and understanding, offers the patient something to rely on, some backing and orientation, so that the daily difficulties lose their frightening aspect and his certainty in dealing with them is surer and more definite.

It is insufficient, however, for the physician merely to provide

¹ Vide p. 122.

moral support; he needs to train the patient to have as much as possible of his own moral support, of self-reliance—and this, as has been stated before depends upon a tolerant understanding of what one is and can do together with a working technique for changing undesirable habits and attitudes to mature and satisfying ones.

The ability to bear responsibility is proportionate to the amount of self-reliance present. There are many persons who cannot endure responsibility and develop emotional difficulties under responsibilities. Many of these persons can perform the most difficult of tasks, and exercise the greatest amount of ingenuity, but only if the final responsibility for success or failure rests on someone else's shoulders. These persons, too, need moral support. Schizophrenic patients, in their pre-psychotic life history, show this dislike or inability to carry responsibility. They have this weakness primarily because there is excessive emotional tone about the possible failure of the task for which they are responsible, and because they have not learned to face failure without fear. The moral support which the physician supplies is not equivalent to "carrying" the patient over rough places in the road, but rather offering a strong arm on which the patient may lean for security and steadiness, until he can walk unaided.

CHAPTER XI

ADJUVANT THERAPY—SUGGESTION, HYPNOSIS, AND DRUGS

SUGGESTION

SUGGESTION is one of the most important measures in the physician's armamentarium. True, suggestion is usually temporary in effect, and it does not attack the basic etiologic factors; but it is nevertheless an invaluable aid until the physician is able to inculcate the more important changes in the personality structure.

At the outset it is well to keep in mind that suggestion may be grossly misused. As has been stated previously¹ suggestion is the keystone of many healing cults, and the secret of the success of many charlatans. When suggestive therapy involves some mysterious or supernatural agent, the results are not only temporary, but eventually harmful. Not only is such a dishonest technique of procedure ethically "wrong," but pragmatically it is harmful because it provides the patient with a false belief, a temporary crutch, which prevents him from facing and adjusting to the basic difficulty which initially produced his symptoms. When such a false support collapses, as it almost inevitably does, the patient is left more helpless than he was and either despairs or becomes prey to a succession of mirage faiths, the promises of which are never redeemed.

Many physicians practice destructive suggestion, without being aware thereof. So many patients are over-sensitive to the physician's opinions and place such emphasis on each word that may have frightening connotations (misunderstood or unexplained gravity of manner or silence can be equally devastating for the patient) that they leave the office perturbed and convinced that their illness is more dangerous than it really is. These patients are affected destructively instead of constructively so that instead of feeling sustained and encouraged by the physician they have rather a sense of increased anxiety which often aggravates their symptoms. It is difficult for the physician to balance between a false cheerfulness and an overly serious and frightening presentation of facts; yet it is important to be able so to state the nature of the illness that *the patient will go away with both a sober awareness*

¹ Vide p. 134.

of what he is confronted with and the knowledge and comforting assurance that his illness can and will be properly dealt with. In certain diseases, for example a metastatic carcinomatosis, an added burden is placed on the physician, to convey the information to the patient, and at the same time help and train the patient to accept the diagnosis with a non-depressing fatalism and without becoming an emotional wreck. Adequate suggestion can, in these cases, emphasize the boon of pain relieving drugs and the value of a sustaining philosophy of life. It is surprising how patients, if they have the proper outlook and perspective, can learn to face with equanimity approaching death. One physician who suffered a coronary attack, and was told by competent authorities that the slightest over-work might result in a sudden stoppage of the heart, settled his affairs and calmly went back to his usual routine of life, resigned to the inevitable, and preferring a short, active existence to a more prolonged passive one. When he suddenly dropped dead at an autopsy table, his friends had the impression that his choice of actions and his emotional response had been the wisest and most courageous of all possibilities. One patient who was brought into the county hospital and who was suffering from metastatic carcinoma, pleaded tearfully to be informed of his true diagnosis. He suspected cancer, but every one answered his questions vaguely and evasively. He could not sleep at night and had a typical anxiety syndrome.¹ After thorough investigation confirmed the entrance diagnosis, the patient was told the exact nature of his illness, and the probable duration of his existence. He was reassured that he would have no pain, and that whatever requests he had would be granted within the limits of the existing possibilities. It was surprising that the patient became calm instead of excited, and the definite diagnosis of the illness together with the knowledge that he would have no pain, relieved instead of disturbed him. For the first night in many weeks he slept, and his natural cheerfulness returned, for he knew what he had to face, he resigned himself thereto, and forgot about it as much as possible.

In the second case, the patient was, at first, in a constant atmosphere of destructive suggestion. He had been told he had some vague inflammatory condition of the bowel. The hospital atmosphere was most kind in that it had attended to the physical wants of the patient; and although he was grateful for and impressed by the implicit wisdom of the nursing care and of the medication, as well as the cordial consideration of the attending physician, never-

¹ *Vide* p. 32.

theless he was haunted by the fear that he had some grave and "awful" disease; and the silent, all-knowing, highly dignified actions of those about him convinced him that his fear was true. The less that was said, the more the patient feared. To the patient in this state of anxiety, bland, "Polyanna" statements were far more damning than an outright admission of the feared facts. His active mind conjectured possibilities,¹ particularly as he did not improve; and his anxiety state resulted in many additional emotional symptoms.

Lack of definite knowledge in relation to an illness, permits the patient's imagination to enlarge on the possibilities. A disease which "may" exist is more liable to be shrouded by a fog of fears and premonitions, than a disease which one knows exists and is able to face directly. When in the face of an obvious intensification of symptoms and suffering, the "Polyanna" atmosphere is maintained, most patients are intelligent enough to understand that "something is being hidden." *Fancy is far more to be feared than fact*; and where fancy is permitted free play, the patient too often develops emotional symptoms in addition to his physical ones.

On the other hand, the extreme reverse attitude of the physician may also carry destructive suggestion. A brusque and untactful announcement, "You have cancer and will probably die within six months," carries with it the virtues of truth, but it also has the realistic effect of being struck with a club. The average patient's understanding of the "incurable" diseases is warped by the wild tales and the gruesome stories of his friends. The idea of death does not as a rule hold so many terrors as does suffering, and it is this latter idea which overwhelms most patients. Here again, it is fear and the lack of exact knowledge that prove so disturbing. A patient suddenly confronted with a poor prognosis tends to enlarge on it far beyond its real significance. To deal with this difficulty demands that the physician spend *time and patience, exercise all his tact and consideration*, and present not the gloomy side of the picture but the actual facts in the least disturbing manner possible. Above all he must convince the patient that courage and a calm philosophical outlook are more than ever important, and that control of one's attitude can make the remaining time pleasant. The physician should try to leave the patient determined and confident that he can face his death without either self-pity or the heroics and wailing of a pseudomartyr.

¹ Vide p. 210.

The personality of the patient will, to a great extent, determine just how he should be told of his illness. There is no formula which can take the place of the physician's common sense judgment,¹ his understanding of the nature of a particular patient. Those who have always tended to be hypochondriacal need a far more gentle approach, and much more positive suggestion in the revelation of an incurable malady than do their more stoical, matter of fact, courageous brethren. Only with much experience can the physician learn just how much to say, and how much not to say. There is no hard and fast rule to be followed, and in some cases, it is even more advisable to avoid telling the patient of the exact nature of his illness, than to have him suffer excessively. Flexibility and adjustability must always characterize the physician's therapeutic attitudes; even when "the rule" is hard and fast.

Positive or constructive suggestion (all suggestion is positive though its effect may be negative or destructive) produces its effects: (1) by increasing the patient's confidence that his illness can be cured or adequately dealt with, and increased confidence is associated with increased ability to carry out the physician's treatment; (2) by directing his thoughts and attention towards pleasant possibilities and away from unpleasant ones; (3) by reorienting his psychobiologic attitude so that the decrease in emotional tone is associated with decreases in smooth muscle spasm, decrease in hypersecretion, etc., and (4) by raising the threshold of pain and discomfort (probably by diversion of attention) so that he is better able to withstand his own symptoms.

When a patient is adequately reassured that he will recover, and the suggestion of good health and happiness is strong enough, he will leave the office with a feeling of confidence in his recuperative powers; he will avoid dwelling on the depressing aspects of his illness, and think more in terms of what he will do and how he will feel; he will change the direction of his thought away from his body and his illness toward outward activities and accomplishments; and he will be better able to disregard minor discomforts, because he will pay less attention to them and understand that the symptoms are not significant.² The value of *suggestion* is thus seen to be far more significant than simply as it concerns the effect on symptoms; and its worth is, therefore, *to be measured in proportion to its effect on general reorientation and change in attitude, rather than in terms of symptom disappearance*. The patient is improved not only in relation to the specific complaint, but in relation to his underlying emotional problem.

¹ *Vide pp. 124; 217.*

² *Vide p. 183 (Case S. G.).*

Suggestion may be *direct* or *implied*. Direct suggestion consists in telling the patient that he will be cured. Implied suggestion, directed toward the same end, may emanate from the optimistic and confident attitude of the physician, the atmosphere of competence in the hospital, the effect of medication, the contact with other patients who have been successfully treated, etc. Both methods should be used as much as possible as aids in the retraining of the patient's attitudes.

The personality of the physician¹ is one of the most important elements in the art of producing desired effects through suggestion; and of all his traits, the physician's sincerity is, in this connection, the most important. His sincerity can be expressed in many ways: his demeanor, a self-confidence which lacks arrogance, a definiteness of procedure which rules out indecisiveness, an interested and sympathetic manner, a frank statement of difficulties with an optimistic attitude as to their solution; all these are expressions of sincerity. After all, the doctor wishes to impress the patient that when he says, "You will get well," he is expressing a real conviction. Obviously a cold, impersonal statement lacks the dynamic assurance that a more earnest personal statement has. The suggestion of "getting well" must not only be intellectually understood by the patient, but to be effective, must be believed "emotionally."² Suggestions for recovery can rarely be totally objective; in some way there must be sufficient emotional overtone to the verbal statement, so that the patient is "won over." Accordingly, it is essential that the patient be impressed by the fact that the physician really believes what he says. The encouraging smile, the sureness of manner, the forcefulness of expression (which must avoid a dogmatic tone), the warmth of tone, vitalize the reassuring words, so as to give the patient not only confidence in what is said but also the moral support which he needs to enable him to face his difficulties.

Direct suggestion that the patient will get well should be accompanied by qualifying remarks. For suggestion to have its desired effect, it should be as truthfully and convincingly stated as is possible. To make a suggestion which ignores the facts of the situation, or is contrary to that which the patient understands cannot be conducive to good results. The physician should be completely honest; and the difficulties should be stated clearly, so that the patient will not fear that "something is being hidden from him." Where possible, this statement of the difficulties should be accom-

¹ *Vide* p. 134.

² *Vide* p. 131.

panied by a diagrammatic and not too scientific statement of how these difficulties came into being,¹ and what role the patient's emotions have played. There should follow an explanation of how, by proper control of his emotions, the patient can facilitate his recovery. After this explanation, and the presenting of a formulation which the patient can understand as reasonable, the suggestion can then be put strongly, "If you follow these principles, you will unquestionably get well."

Such a direct suggestion is made all the more forceful, because it is reasonable; and in addition, it places upon the patient the full responsibility to do what can be done to alter his emotional state. It appeals to both the reason and the spirit. The results of this type of suggestion are likely to be relatively more permanent because the patient both understands, and is called on to cooperate in achieving the desired goal. He has an active rather than a passive role to play.² It is well to warn the patient that the miracle of an over-night cure is not to be expected, for a symptom which has existed for many years cannot be removed in a few days; but, at the same time emphasize that the symptom can be removed, and will be removed, the length of time necessary to obtain complete and permanent relief depending largely upon how much the patient will cooperate. In any case, the patient should be told that though the symptom may be annoying, it is not fatal or dangerous, and that there is no need for more concern over its outcome than there would be for a toothache or a sprain. "And it will not take long to overcome the annoying features of the ailment."

The effect of suggestion varies with the patient. Some persons are extremely susceptible and others extremely resistant. That many persons are susceptible to suggestions of illness, is exemplified by the assiduous readers of the health columns of the daily newspapers.³ These persons will quickly skim over the statements concerning the possibility of cure or the mildness of the ailment discussed, will pessimistically insist that they will surely be the one in a thousand to develop the unusual symptoms described, and, ignoring all optimistic expressions, will in some manner manage to find dire and dark prophesy for themselves. These patients are oriented toward a philosophy and outlook of gloom. Their general existence, exclusive of their physical complaints, is an unhappy one. Their emotional thinking is such as actually to oppose any pleasant feelings. These persons "glory in their misery,"⁴ and are

¹ *Vide* pp. 181; 218.

² *Vide* p. 217.

³ *Vide* p. 77 (Identification).

⁴ *Vide* p. 218.

almost masochistic in the manner in which they appropriate and cherish any suggestion of unhappiness.

The treatment of this group, must be directly aimed toward their fundamental attitudes, since "suggestion" avails little for patients who are cynically skeptical and "know" they can never recover. These patients, however, are easily led by dramatic prophets of "a new vision of life."

There are many patients, however, who are not very susceptible to suggestion in its direct and open form. These persons "think too much," in the sense that they over-emphasize the importance of every possible obstacle and are checkmated in their recovery before they start. Such persons also are better approached with the "rational" method than with the suggestion technique. There are many who, having been presented with and having accepted a logical and rational formulation, can then be greatly influenced by the suggestion that the results predicted by the physician are the inevitable conclusion of the matter. How much suggestion should be used in any of these instances must be determined by the response of the patient at the time. As has been previously pointed out, the patient's expression, his attitude, his verbal responses should be constantly observed in order that the treatment may be better guided, and that the physician may continue or discontinue in proportion to its effectiveness whatever form of therapy he is using.¹

Still other patients are overly suggestible; but this over-suggestibility usually proves to be a disadvantage, for the suggestions given them by the physician may be quickly nullified by other suggestions. Such patients may leave the office, fully confident and impressed, only to return dejected and disconsolate because they have heard of some exceptions to their case, or have experienced some pains which, in turn, have started new "suggestions."

One of the commonest ways of giving suggestion is through the use of placebos; *i. e.*, substances which in themselves may have no particular therapeutic value for specific conditions but which usually consist of such innocuous agents as bicarbonate of soda, sodium chloride, or bromides. It has been remarked that vitamins in capsule form have come to be one of the most widely used of placebos; and every physician knows that many injections have far greater suggestive than actual value. There are some psycho-

¹ *Vide* p. 113.

neurotic patients to whom placebos must be temporarily given, so accustomed are they to regulating their lives by "pill-time," until the physician has established enough personality change so that the patient realizes that he himself and not medication will solve his problems. At best, placebos are temporary in effect, and the patient sooner or later fails to obtain relief.¹ Generally, much better results can be obtained if during the first few interviews the physician spends sufficient time to establish the real basis of emotional disturbances, for then he need not temporize with palliative measures but can direct his suggestions along constructive and curative lines.

The physician's staff may be an invaluable aid and asset. Too much cannot be said for the pleasant, cheerful, and sympathetic nurse or secretary who first meets the patient. Embarrassment, shyness, and even fearfulness can often be relieved by a competent nurse who without being officious calms and reassures the patient before the interview with the physician. In a hospital the effect of suggestion from the nursing force is extremely great, for the nurses constitute the more or less constant environment of the patient. Nurses who are machine-like, irritable, impatient, and demanding may be efficient in giving the exact dosage of phenobarbital prescribed but may at the same time so disturb the patient by insistence and abruptness of manner as to nullify any benefit from the medication. A kind, sympathetic nurse who is patient and pleasant is far more calming than almost any form of medication. In delirious reactions which are so common before sleep, the nurse with a soothing and reassuring tone can procure sleep and eliminate fear where medication would fail.² Fears are rarely dispelled by drugs; while courage can be instilled by an understanding nurse.

In a hospital, good effect can also be obtained if the patients are divided into groups, the center of each being a patient who is almost well and who, accordingly, can exercise a cheerful influence. In hospitals or sanitariums for nervous ailments, such an arrangement is most effective. Often a patient who is almost recovered wishes to aid one much sicker than he; and such a patient, having himself experienced the depths of despair, and the torture of doubts and fears, may be a better counselor and a greater comfort than a more highly trained but less understanding person.

It must always be remembered, however, that suggestion is only an aid, and not the essence of therapy.

¹ *Vide* p. 137.

² *Vide* p. 380.

HYPNOSIS

Hypnotism which has been used for many years is a phenomenon which is not clearly understood, though the consensus seems to be that hypnosis is merely a state of increased suggestibility. Hypnotists, contrary to popular opinion, do not have tremendous or occult powers, nor is the subject weak willed. Intelligent and unintelligent persons can be hypnotized, as well as young and old. Indeed, it may be said that only the very feeble-minded, or disturbed psychotic patients are consistently resistant to this form of therapy. Only in unusual circumstances can a person be hypnotized entirely against his will; although skeptics who are willing to undergo the attempt are often the best subjects. On the other hand, not all persons can be hypnotized¹ and it is difficult to foretell those who will be good subjects and those who will not.

The therapeutic effects of hypnotizing a patient are the same as those of suggestion, except in the matter of degree; and hypnosis has the same limitations in that it is only an adjunct and not a substitute for the essential psychotherapeutic removal of the cause of the neurotic illness. If the slower but more lasting psychotherapy is not used, the symptom removed by hypnosis will soon recur, or some other neurotic symptom will occur in its place.² It is a common experience to hypnotize a patient in the dispensary and in the most impressive and dramatic fashion remove the torticollis,³ hysteric paralysis, aphonia, or any one of a host of psychoneurotic symptoms without real organic basis, only to have the patient appear at the next session with a return of his entire symptomatology. However, hypnosis may be used as an aid both in determining the psychologic difficulty⁴ and the subsequent removal of this cause.

The technique of hypnosis is relatively simple, and can be practiced by most physicians. In principle, hypnotism is produced by repeating the suggestion over and over that the patient is asleep. If sufficient repetition is used, the suggestion takes effect and the patient goes into a hypnotic sleep. It is advisable to have the patient in a darkened room, which is as quiet as possible. The patient reclines on a table or couch and is told to relax. The physician should speak softly and in a monotone. The patient's attention gradually becomes narrowed and fixed on the thought of sleep. The patient is told that his limbs are becoming heavy, that

¹ *Vide p. 156.*² *Vide p. 233.*³ *Vide p. 37.*⁴ *Vide p. 156.*

his whole body is relaxed, and that his eyes are very tired. Then he is told that his eyes are becoming heavier and heavier so that he cannot keep them open. The phrase "Go to sleep, go to sleep," is repeated constantly. After some minutes of such repetition the patient develops a hypnotic trance, which may or may not go on to the state of amnesia.¹ One can test this state by asking the patient to hold his hand in the air until commanded to put it down; the hypnotized patient can without evidence of tiring keep his hand up indefinitely. Or, the physician may brush an area with alcohol and state that the patient cannot feel anything, and then pierce the skin with a needle. Generally, however, if the patient appears asleep, one makes no attempt to determine the depth of the hypnotic state, but proceeds with the therapeutic suggestions. After the patient has awakened, the physician asks how deep the sleep was for this knowledge is useful for the next session. Some therapists awaken the patient after he is hypnotized, ask "how deep he is under," and then send him right back to sleep by the same method, acting on the information thus obtained either to attempt deeper hypnosis or to begin with the suggestions.

Although the above described technique is generally followed there may be many individual variations. Verbal suggestion is sufficient; but some physicians reinforce this suggestion by having the patient focus his eyes on a bright object or glass held about a foot above the eyes, or by stroking the patient's skin, or by staring into the patient's eyes. Some prepare for hypnosis by an elaborate and dramatic admittance of the patient into a darkened room. On some occasions, a narcotic administered one-half an hour before an attempt at hypnosis reduces the patient's resistance; and once the patient responds properly even with the aid of a drug, the subsequent response can be similarly obtained without this aid.

However, all these adjuncts are unnecessary. One may hypnotize a patient sitting up or standing, in a bright noisy room as well as a dark quiet one, alone or in the presence of others. Once the patient has been successfully hypnotized in a reclining position, it is my custom to have him sit in the office chair during the subsequent hypnoses. These details, however, are simply a matter of convenience.

In the therapeutic suggestions, it is not only important to suggest that the symptoms clear up, but to suggest that the basic emotional difficulties be dealt with in a more hygienic manner. Indeed, *far*

¹ *Vide p. 234.*

*more emphasis should be placed on the underlying factors than on the symptom.*¹ This line of suggestion presupposes that the patient was examined and studied before the hypnotic treatment was begun, and that an analysis was made of the etiologic factors. Hypnosis thus becomes a valuable aid in enabling the patient to carry out the retraining of the personality, as well as "suggesting away the symptom." Hypnosis which deals only with the symptom cannot obtain permanent remission, and the symptoms will recur until the basic cause of the symptoms is removed. The case of Mrs. K. U.² is used as an example of such hypnosis and suggestion. The following example is the essence of the technique which the author uses:

"I want you to relax. Relax every part of the body. Now when I pick up your hand I want it to fall as a piece of wood without any help from you. (The examiner then picks up the hand and lets it drop to the couch.) No you helped raise the hand that time; just let it be so relaxed that you have no power over it. (The test is repeated as often as is necessary for the patient to learn to let it drop.) That's the way. Now relax your legs the same way; just let them be limp. Now take a deep breath and let it out slowly. Now concentrate on your toes. A warm sensation starts in the toe and sweeps up your legs, abdomen, chest, into your neck. Now relax your jaws. Relax them more, still more. Now your cheeks; now your eyes. Your eyes are getting heavier and heavier. You can hardly keep them open. Soon they will close. Now smooth out the wrinkles in your forehead. Good. Now make your mind a blank. Allow no thoughts to enter. Just blank. You see a blackness spreading before you. Now sleep. Sleep. Sleep. Sleep. Your entire body and mind are relaxed—sleep, sleep. (This phrase is repeated several times in a soft and persuasive voice.) Your sleep is becoming deeper, still deeper. You are in a deep, deep, sleep."

It must be emphasized that this is only one technique, and that there are innumerable modifications of it. Having thus spoken to the patient, one continues with the therapeutic suggestions. In this case, the girl had a torticollis.

"Now relax your neck; relax it still more. Your head feels so very good, and all the tension is gone. It relaxes still more and still more. Now the head begins to straighten itself out. It turns to the midline—and your head tips to the opposite side. Good. Now your chin is down and your head is in normal position. It will continue to be normal. It feels so good now. Your head will remain normal. (After these specific suggestions, the emotional bases behind the symptom should be dealt with.) Your aversion to your employer will disappear, and you'll regard him as an old and disagreeable person; but you will not be affected by his manners. You will

¹ *Vide* p. 183.

² *Vide* p. 38.

not be disturbed by your husband's irritability but will just let his anger fall off you—like water off a duck's back. You will learn not to let anything bother you. That's why you will face everything straightforwardly. Your head is straight now and will stay that way. Next time you come here you will go to sleep more easily and quickly, and until then your head will remain in midline. Now gradually wake up, and you feel very well. Wake up completely."

The⁷ above procedure may take anywhere from ten to thirty minutes. The patient may awaken easily, or may be permitted to sleep until he awakens spontaneously. If no command to awaken is given, the patient will usually awaken by himself. Only in rare and extremely unstable persons will the hypnotic sleep continue very long. (In intractable cases, a subconvulsive dose of metrazol (2-3 cc. intravenously) will be effective in awakening the patient.) It will be noticed in the above talk to the hypnotic patient that an attempt was made not only to suggest that the torticollis disappear but what was more important, that the underlying attitudes (which had previously been determined) be dealt with. *It is this change of attitude which will cause the head to remain permanently changed.* The patient usually returns after the first visit with a partial or complete recurrence of his symptom; and after a discussion to determine and treat the underlying emotions, the hypnosis is again repeated. In some instances several visits a week for a month or two are necessary; in others, fewer or more may be required. It is generally advisable that the treatment be extensive as well as intensive; i. e., that the patient come back once every two or three weeks over a long period of time until the cure is firmly established. The keynote of maintained improvement in psychotherapy is persistence.

Roughly speaking there are three stages of hypnosis. These stages are arbitrary and are only crudely descriptive of the level the patient is in. Since hypnosis is an increased state of suggestibility, there may be fluctuating degrees of intensity of suggestibility in the patient at one time, differing according to the attitudes of the patient. Moreover the borderline between suggestibility and waking, and between the various stages is so vague and so changeable as to be impermanent. However, in spite of such qualification, one may say that there is first the stage of increased suggestibility during which the patient is fully aware of all that is being said and done. He feels as he ordinarily does when conscious. However, this stage is accompanied by heightened suggestibility, and suggestions may have a powerful effect.

A young man was hypnotized before a group of students. He was told that on awakening he would tug his right ear after the examiner had counted three. At the command to awaken, the subject stood up and spoke very sarcastically. "I wasn't asleep. You didn't have me hypnotized. I just lay there and listened to everything you said but I didn't have to. You told me to pull my ear and I won't. You didn't even get near to hypnotizing me." While this young man was "orating," I kept looking steadily at him and counting 1—2—3. At the count of three, he suddenly stopped his tirade, said "Aw shucks," and tugged at his right ear.

In other words the suggestion had its effect and the boy felt compelled to do what was suggested in spite of his resistance.

An almost similar instance occurred with a young man who was in great difficulties with his wife over some minor problems such as ordinarily occur in married life. He sulked and refused to speak to her and was exceedingly irritable. He had a "nervous stomach" and could not eat; his hands had a "nervous" tremor. His brother-in-law referred him for advice; and after some discussion, the young man was placed on the table and an attempt made to hypnotize him in the manner described above. On awakening, he made the same statement as the boy just discussed. "I wasn't asleep, I just lay there and heard what you said, and it didn't phase me." Three days later the brother-in-law approached saying, "I don't know what you did to him, but yesterday for the first time he went out and acted like a human being again. He had his first big meal last night, was cheerful, and went for a long walk with Sister." Here again it becomes apparent that only a surface depth of hypnosis did not prevent its effectiveness.

The second stage is one characterized by catalepsy and anesthesia. During this period one may place the patient's limbs in any position and they will remain there without fatigue for long periods of time. Anesthesia may be tested by sticking pins through the skin. Even during this stage the patient is aware of all that is going on, but feels sleepy and listens passively to what is said. He may be completely relaxed, and unable to open his eyes but conscious of what is being said.

Mr. K. L. described the sensations accompanying hypnosis as follows: "I was just laying there, hearing everything you said, and feeling all right. But I kept wondering why my hand was up there in the air, and I didn't seem to feel it. It was just like it was floating and I didn't have to hold it at all." (The patient's hand was raised above his head, and he maintained this awkward position holding his arm erect for fifteen minutes with the hands and fingers perfectly relaxed and without any signs of fatigue.)

The third stage has all the characteristics of the other two, plus that of complete amnesia. There is complete loss of memory for the hypnotic event, although the suggestions given may be fully carried out. This stage is the most difficult to obtain, and one should not discontinue giving suggestions simply because this

stage has not been reached. Suggestions, however, given in this period tend to have more effect than do those made in the two minor stages. The physician may apparently be using the same technique and yet obtain different stages of hypnosis in different patients. The physician-patient relationship has been different in each case.

Post-hypnotic suggestion consists in giving to the patient during the hypnotic stage suggestions which he is to carry out during his waking period. All manner of tricks can be performed by this method; but the physician interested only in therapy should avoid any suggestions which might make the patient appear ridiculous, for the patient, although hypnotized, may retain some awareness of his surroundings and will resent the situation in which he was placed, and may become a difficult subject later. All therapeutic suggestions are essentially post-hypnotic; inasmuch as the aim of hypnosis is to change future performance of the patient.

There are relatively few contraindications to hypnosis. As has been stated, the patient is not made a moral weakling or in any way disturbed as far as his character is concerned. It is not a method to be chosen if the usual psychotherapeutic procedure can be practiced, for it shrouds the technique of cure in a mysterious and "someone else doing this for me" attitude; whereas the physician wishes the patient to develop self-reliance. Moreover, during hypnosis one cannot be made to do that which he basically is opposed to doing. Under hypnosis a man cannot be made to steal, to commit murder, nor can a woman be made to have sex relations or to expose herself. The person during the entire hypnosis still maintains some degree of awareness of what is going on (hypnotic sleep is not true sleep) and so will not permit violations of his moral code.

One experiment was reported as follows: A patient was hypnotized and a rubber knife was placed on the table. He was told to pick up the knife and stab the examiner. He responded immediately, making the stabbing movement. The knife was thought to be too apparently rubber; so it was silvered and made heavier. On command, the patient again stabbed the examiner. Not being satisfied, the examiner donned a metal breastplate underneath his clothes, and laid a real knife on the table; but this time, the patient picked up the knife, and refused to make any stabbing movement. In other words, even under deep hypnosis there was enough awareness present so that he could distinguish the difference between a real and a rubber knife.

Many similar experiments can be cited to demonstrate this general tendency. However, certain hysterical patients may develop hallucinatory experiences, so that they may accuse the hypnotist of improper advances. It is, therefore, always advisable to have a nurse in attendance during hypnosis.

Hypnosis is of value in pregnancy where labor may occur without pain or awareness of delivery.¹ It is also of value in preparing a patient for operation so that the patient may be asleep when brought to the operating room, and be anesthetized without returning to consciousness. It is of great value in the treatment of stuttering, aphonia, and various symbolic symptoms.

MEDICATION

Although the essence of therapy consists in analysis of the emotional background and the resynthesis of the new attitudes, in many patients it is necessary to treat the symptom itself if this is very disturbing. The medical treatment of the symptom in these instances is usually confined to sedatives. If the patient has a pain, or cramp, paresthesia, or twitch which has resulted from emotional difficulty, then the treatment must be directed not at the pain, or twitch, but at the emotional disturbance. However, sedatives may be used effectively. Often they have suggestive power in themselves, but their use is to be restricted; for practically, if one tells a patient, "This medicine will cure you," the patient may be relieved for a week or two, and then will come back with the statement that he is no longer helped, and with the query, "Is the doctor sure he knows what the trouble is, since he was so sure of the cure that failed?" Barbitol, grains $2\frac{1}{2}$; sodium bromide,² grains 10; phenobarbital, grain $\frac{1}{2}$ are characteristic sedatives which enable the patient to bear up until the psychotherapy begins to take effect. Sedative medication should *not be given routinely* or at regular hours for there are many times when the patient has no need for sedation. Instead I tell the patient he can take the sedatives when he feels the need,³ taking them every half hour but never using more than 4 to 6 tablets a day. "Avoid taking medicine" the patient is told, "unless it is absolutely necessary." In practice, one finds patients will quickly limit their dosage to the equivalent

¹ Vide p. 96.

² Vide p. 377.

³ The danger of addiction by this method is less than by the routine "dosing" of patients, for before the patient has taken sufficient medication to become addicted, the psychotherapeutic idea of "aiding himself" works to reduce the amount needed. Moreover, the sedatives should be alternated from time to time.

of 1 to 2 grains phenobarbital a day on "bad days" and take no medication on other days. To the patients to whom I give such drugs, I always make some such comment as, "This medicine will help relieve the symptom, but it is not curative: the cure will come only by getting at the cause, and the more you can do to remove the faulty emotions at the bottom of the symptoms, the sooner will you be permanently relieved"; or "The medicine is a crutch which needs to be thrown away as soon as you can stand on your own feet." When one deals honestly and tactfully with the average human being, he generally remains a patient who is willing to return for treatment. Indiscriminate use of medication fails in the long run to produce a cure and turns many patients to "faith" cults or charlatans.¹

Gradually, such medication is decreased in amount and frequency as the patient becomes able to get along without it. Some patients may discontinue its use after a few weeks, and others may need medication for months. Moreover, the potency and effect of the medication varies with the associated psychotherapy.

Mrs. O. N., aged fifty-eight years, complained of insomnia. Dr. X. had tried all means of treating it. Chloral hydrate, sodium amytal, nembutal, sodium bromide, phenobarbital, and other drugs were used in very large quantities and either failed to produce any sleep or allowed only a few hours sleep. He could discover no organic basis for her sleeplessness. She was referred to the psychiatric dispensary. Two weeks later, Dr. X. accosted me in the hallway: "What is this powerful medicine you are giving her? She takes one capsule and sleeps all night." Dr. X. was surprised to learn that all the patient was getting was $2\frac{1}{2}$ grains of barbital, a dose which the average patient takes three times a day with little effect.

Mrs. O. N. was suffering from a severe emotional strain. Her only support was a twenty-seven year old son who, for the last few years, had been drinking excessively. She cried bitterly and hopelessly as she narrated her sorrows. The son was interviewed and persuaded to drink less, and the mother was overjoyed. The release in tension was sufficient to permit her to sleep with very little medication. Some time later, the son began to drink again; but this time he was taken to a hospital, and the social service department made arrangements for the mother's care. Insomnia, which had started to make its appearance again, was immediately checked by proper handling of the stress.

Whenever a person forms a habit of taking a drug excessively it is generally because his neurotic personality is such as to require sedation, and not because of the drug characteristic in itself. To a large extent this statement holds true even of morphine.²

¹ *Vide* p. 134.

² *Vide* p. 466.

Mr. K. L., aged thirty-four years, was a brilliant architect, who unfortunately developed dipsomania. He would drink for two or three months of the year and then be without any taste for alcohol in the intervening time. He came for treatment at the beginning of one of these sprees and seemed to clear up immediately under psychotherapy. One day he complained of insomnia, and was given a half dozen tablets of pentobarbital (nembutal) with directions to take one before retiring. In the next two weeks, he would stagger on entering the office, but he denied alcoholism and had no odor on his breath. His friends remarked also that he staggered on walking in the street, but did not appear "drunk" and had no alcohol odor. Finally, the patient admitted that he had felt calm and relaxed after taking the nembutal and so had ordered them himself and was taking from 6 to 12 capsules ($1\frac{1}{2}$ grains each) per day. He in effect had substituted this drug for the alcohol he had given up.

This patient was already an addict and merely shifted the kind of drug he used from alcohol to nembutal. Opiates are to be avoided, as a rule, in the psychoneuroses, but are very helpful in depressions.¹ Insomnia is a problem which will also be discussed in detail in Chapter XIV. Benzedrine sulphate is a valuable stimulant, particularly where there is the element of fatigue or depression. It is best given before noon so as to avoid its stimulating effects producing insomnia. The dosage is usually 10 milligrams at 8 A.M. and at 11 A.M. but this may be twice or one-half the effective dose for a particular patient. As a rule, there is marked effect the first few days, and then the efficacy seemingly wears off and taking the benzedrine produces no results. Moreover, in many patients after stimulation there follows a "let-down" which is so bad as to make these patients forego the drug.

Again it is emphasized that in the giving of sedatives, it should always be stated that the medication is not curative and that it is essential for the patient to solve the emotional conflict which underlies the symptom.²

METHYLGUANIDINE

A valuable adjunct in the therapy of the chronic mild depressions is methylguanidine. Madden and Kaplan (1941) described improvements in a schizophrenic patient who had been severely burned; and in further experiments noted improvements in schizophrenic patients who were injected with the blood of normal persons who had been severely burned. They observed that methylguanidine was regularly eliminated in the urine of burned persons;

¹ *Vide* p. 421.

² Other sedative therapy will be discussed in connection with the psychoses. Ch. XVII.

and they then used this drug to produce severe reactions in patients. Though they obtained some improvement, the therapy has not been accepted.

When this drug is given intravenously in small amounts the patients experience a severe flushing reaction, difficulty in breathing, and a feeling of fright. This reaction comes on within twenty seconds after the injection, and disappears within one minute afterward. If too large amounts are given, a convulsion may ensue or a severe headache result. If the drug is injected outside the vein, the patient will experience a severe burning sensation for several hours. I find that 1 to 2 cc. of a 25 per cent solution is the best amount to use.

The value of this drug appears to me to be primarily psychotherapeutic, in the small quantities suggested. When one uses a psychotherapeutic formulation, and then "reinforces" the suggestion of improvement by such a physical, though temporary, shock, one finds that many patients will improve more quickly. In patients who find it difficult to accept a purely psychotherapeutic approach, the initial use of the drug may be very helpful. Here again, as elsewhere, the patient must be informed that "not the medicine," but the "change in attitudes" is the essential in therapy.

CHAPTER XII

ENERGY MOBILIZATION AND EXPRESSION

ONE of the most important aspects of therapy of the neuroses and psychoses concerns itself with the problem of energy mobilization and expression.

Energy is a *force expressible in work* (G. fr. *en*, in, and *ergos*, work). Energy may be stored in the organism very much as electricity may be stored in a battery; and may be utilized under proper conditions. It is inherent in the living cell, and is the basis of the "force of life." Energy is maintained in living matter by such chemicals as food, water, and air; is utilized for such maintenance states as are involved in basal metabolism, circulation, respiration, digestion, etc., and for such functions as the muscle action and cerebration which enable man to obtain these chemicals. The amount of energy possibly available to any given cell or cell groups (*e. g.*, the human being) varies individually very much as does the electrical capacity of various sizes and types of batteries, the amount present being to a large extent determined by the inherited, genetic, and constitutional factors.

In dealing with this problem, one must keep continuously in mind the difference between energy which is latent and potential, and energy which is expressed in work. Some persons have a large capacity for work, for energy output, which they never express; others may accomplish little for many years and then under proper motivation become very creative. In most persons there is much *potential* energy which does not become transformed into actual observable forms of energy.

From this potential source, all subsequent expressions of energy must derive. But in order for this potential energy to be utilized it must first be mobilized; and this mobilization may be accelerated, retarded, or inadequate. The demands of society and, as we shall discuss later, the inhibitions and frustrations of mankind all serve as stimuli for such mobilization. There are many situations which stimulate the mobilization of energy so that it may be released; but when the energy is not released, tension results. Tension then is to be regarded as a symptom of mobilized but unreleased (bound) energy. Theoretically and practically, *it is possible to stimulate the mobilization of energy in man by motivation,*

by creating tension states, and by other means, and then to redirect this energy into constructive fields. This mobilized energy is dependent upon the amount and organization of constitutional energy and differs from spontaneous energy expressions such as are demonstrated in the running and playing of children.

The problem presented to the physician and the patient is a threefold one of: (1) *mobilizing and stimulating energy production* where the supply is insufficient to meet adequately the exigencies of life; (2) *preventing the formation of energy states which may become harmful* to the person; and (3) *providing adequate release for excess energy.*

Before considering techniques for mobilizing and channeling energy, one must focus attention for a moment on the mechanism of energy mobilization.

Reduced to its simplest statement, the fundamental needs of man are to obtain food and sex and to avoid destruction;¹ and the human organism is so constituted as to respond in the presence of these desires by creating the energy necessary for their fulfillment. The amount of effort expended to obtain satisfactions and pleasures and to avoid dangers and pain is proportionate to the intensity of the drive and the amount of environmental resistance. The two—drive and resistance—are rarely if ever perfectly correlated.

Stimulated by desire, the entire organism orients itself in such a manner that it is ready psychologically and biologically to proceed to satisfy the desire. The adrenal-sympathetic-vegetative system is called into play; and by the same token the whole organism is in some degree changed so as to carry out the demand. In the most primitive, non-restraining society, impulse is succeeded by action, for the impulse sets into motion those forces which make the body ready for action; and there is no restraining element to prevent the direct expression, or the attempt at direct expression of the desire. Hunger is satisfied as it is perceived, provided food is available; when food is not easily available, this appetite urges the person on to direct aggression in order to obtain satisfaction. The same is true of other primitive drives and desires; in the absence of restraint there is a direct effort made to satisfy one's needs; in the presence of restraint, efforts to satisfy the desire proceed indirectly, by first dealing with the obstacle. Two complicating factors are at once discernible, though they are in reality but two aspects of one factor: the resistance offered by the environment. The compli-

¹ *Vide* p. 45.

cations may be expressed in the following statements: (1) though the organism orients itself for satisfaction, the satisfaction may not be fulfilled, and (2) the physiologic orientation once set up cannot be turned off as simply as is a water faucet or an electric switch. For example, the sight of food to the hungry animal calls forth a change in the organism preparatory to ingest that food; and there is salivation, increased gastric secretion and motility, etc.; in other words, a psychobiologic orientation is established which urges the hungry animal to eat.¹ Similarly for human beings, *whenever a desire of any intensity is present, the adrenals have begun to pour forth their secretions, the muscles have become more tense, the liver has secreted more sugar; in other words, the organism has made potential energy more readily available to the system for immediate use.* This energy may be said to be *mobilized*. When the organism proceeds to utilize this available energy along the lines of the desire the whole being "feels" well. When, however, this potential energy is not adequately released (when the hungry animal is not permitted to eat the food he has seen), when the desire is inhibited, or when too much energy is produced, then tension arises and symptoms occur.² A state of tension results in the organism when the organism prepares to gratify its desires (*i. e.*, becomes psychobiologically oriented toward the desire) but cannot do so. The organism is in a state of preparedness which could best be satisfied by fulfilling the desire; but following the thwarting or frustration, the organism is left seething with mobilized "energy" which is ready for expression but not expressible. Such a state results in a disturbance of the smooth functioning of the total organism, and in the case of human beings, may give rise to psychoneurotic states.

For civilized man the problem is infinitely more involved and more acute.³ The development of a socially interdependent life, with its greater complexity of existence, the resultant indirect methods of obtaining food and protection from danger, and the necessity for socially approved methods of obtaining sexual gratification, have changed the primitive reactions of man; inasmuch as impulse can no longer be succeeded by immediate action, lest some code of the group be violated. Accordingly, delay, restraint, postponement or even discarding of one's impulse rather than seeking its direct expression has become the rule. Not only does he have less direct release of energy, but in addition, civilized man has pyramided upon his primitive desires a host of secondary ones with a consequent continued orientation toward these desires with

¹ *Vide* p. 94.

² *Vide* p. 82.

³ *Vide* p. 46.

the result that there is a continued mobilization of energy which may express itself externally (either constructively or destructively) or internally as a constant state of tension.

There is a paradoxical quality in the role which the social situation plays in the creation and mobilization of energy. As has been previously stated and implied, the original drives have been endlessly complicated, increased, and extended so that the human organism is constantly bombarded by countless desires—many of them self-contradictory, many of them impossible of satisfaction, and therefore, is in a constant state of mobilizing energy. At the same time society is so constituted as to offer innumerable prohibitions, inhibitions, and frustrations to energy expressions. The paradox lies in the fact that the inhibitions themselves usually result in the further mobilization of additional energy which requires some form of expression (often inhibitions may “paralyze action”).

When an impulse is frustrated and tension results, the resulting available energy is directed first toward the removal of and attack upon the frustrating source. When the frustration comes from society, because of those arbitrary decrees called laws and customs, the expression of the inhibited tension tends to be directed against society; and in the child as well as the adult the attack may center upon the mores, customs, regulations, and institutions. Such attacks are often ultimately of value to society inasmuch as they may force changes in unhealthful social regulations.¹ When the frustrations come from inhibitions built up within the person, the attack tends to be directed at the self, with consequent feelings of inferiority, irritation, anxiety, and other psychoneurotic symptoms. The lack of release, along with the constant mobilization of energy makes for disease processes rooted in tension. Not only does striated muscle tension result, but tension or spasm occurs in the smooth musculature giving rise to such clinical syndromes as spastic colitis, paroxysmal tachycardia, hypertension, urinary retention, etc. Secretory glands are involved, and the whole gamut of physiologic responses discussed in Chapter IV may be witnessed. If these attacks upon society or self are open and conscious and the attitude (orientation) toward the irritant adjusted, the energy behind the attack may be dissipated with a subsequent cessation of attacks; if the attacks are inhibited, the unreleased energy continues to accumulate and to be a source of unrest. In some countries, the use of “free speech” serves to dissipate the tension or

¹ *Vide* pp. 190; 247.

bound energy which otherwise would serve to form violent revolutionary groups.

The presence of inhibitions and frustrations may serve as a valuable stimulus toward making energy available; yet as is the case with most forces in our world, any extreme is detrimental; and excess inhibitions may lead to the *bottling up of energy* so as to make the person at best, unstable and non-productive; at worst, restless, neurotic, or destructive.

One may say, therefore, that there are three types of energy: (1) potential constitutional energy; (2) "mobilized" (pent-up or available) energy; and (3) expressed energy.

Potential constitutional energy is dependent in large part upon the genetic structure, and the resultant type of physique or constitution. In this connection it must be emphasized that by physique is not meant simply the muscle and bone structure, but also the functional anatomy of the cardio-vascular, the respiratory, and other body systems which are intimately correlated with the ability of the organism to adjust and to maintain adjustment. It must again be emphasized that the physique does not *produce* the type of personality response and energy manifestations, but is merely a fairly close correlate to these manifestations, which probably have a common basis in their development. Further, the terms "basic amounts of energy" and "basic personality" are theoretical expressions of energy reaction which the organism might develop if there were no inhibiting or modifying elements. Since, however, all life is constantly molded by forces about it, the resulting personality may have characteristics which are at variance with the underlying tendency.¹ Yet with all these considerations, one is forced to the conclusion that the basic amount of energy available in any given being is primarily dependent upon the type of constitution, and that under ideal but similar circumstances of training, individual differences will occur because of dissimilarity of genes and chromosomes. Such constitutional factors as those involved in manic-depressive swings are illustrative of the underlying physiologic bases. Patients who have manic reactions² mobilize and express a great deal of energy; they sing, talk, move about constantly; they have many ideas; and in the hypomanic states at least, can accomplish a great deal of constructive work. When the force of the energy becomes so great that it can no longer be controlled, constructive utilization of the energy disappears. In the opposite phase, the depression³ is characterized by sluggishness,

¹ *Vide* p. 47.

² *Vide* p. 403.

³ *Vide* p. 402.

inactivity, few ideas, little speech, seclusiveness, and an inability to accomplish the work which ordinarily would be done. This high or low expression of energy is primarily dependent on the physiologic swings rather than a resultant of environmentally determined forces. The mobilization of this potential energy is a continuous process which once set into motion tends to go on to completion.

In ordinary life the person expresses this state of unreleased mobilized energy in the form of tension and in the subjective feeling of "wanting to tear something to pieces," or "I'll burst if something doesn't happen soon." *This mobilized energy is created by the psychobiologic orientation by which the organism prepares for action* (for example as a response to some irritation which one wishes to remove, or in preparation for some pleasure one desires to obtain). This form of energy is reduced either by changing the psychobiologic orientation (which keeps the organism in a state of continued preparedness to act with the memory of the irritation acting as a stimulus in itself) or by providing some form of energy release. If neither step is taken, the person will remain tense, and his bound energy may result either in a general state of tension or in some substitute type of release such as spastic colitis, essential hypertension, psychogenic vomiting, etc.

Expressed energy may appear in the form of physical or mental work. It may be constructive, destructive or undirected. The child spontaneously expresses his energy in play, in running, jumping, shouting, and various enthusiasms. Depending upon the milieu, some of this undirected energy in the child may be constructive or destructive. Whether existing energy is utilized later in life systematically or sporadically is dependent in large part upon the training received. The early habit patterns¹ are of utmost importance and good work habits should be inculcated early in life. The amount of energy which is expressed varies with many factors, including internal changes of growth and disease, as well as external factors of conflict and opportunity.

The role of motivation is an important one in the mobilization of energy. By means of motivation, the person sets up goals which he wishes to obtain. The organism keeps energy constantly *mobilized*, by repeatedly orienting itself in the direction of this goal. Thus energy may be made available in the negative manner of inhibitions as well as the positive manner of motivations.

In the physician's effort to mobilize energy in those patients

¹ *Vide* p. 256.

who are inert, it becomes necessary to carry out the principles stated above. A vast literature on motivation deals with this problem. *The problem resolves itself into one of stimulating the person to consistent mobilization of energy which can be used in work, while at the same time (a) avoiding the production of such excess energy mobilization as to result in neurotic tension symptoms, and (b) providing adequate release of unutilized mobilized energy.* Such an ideal is difficult to realize in its entirety; though many persons violate all the principles involved, it is, nevertheless, possible adequately to approximate such working states. Many persons, "normal" as well as neurotic, do not mobilize their energy in any consistent manner, produce (via the mechanisms described in the early chapters of this book) energy which gives rise to psychoneurotic states, and have no mechanisms for release of their excess energy.

In the development of the person, the ordinary inhibitions of civilized life will stimulate the mobilization of energy. It is necessary, *very early in life*, to develop *habits of work* so that what energy arises will flow easily through proper constructive channels. These habits of work are difficult to acquire, particularly after adolescence, and the child should have more or less definite periods in which he learns to concentrate and work, as well as time for play. If the child develops these habits adequately, they serve then as means of energy mobilization when the person wishes to do something but "can't bring himself to do it." In other words, the very mobilization of energy becomes automatic and habitual.

The next step in mobilization is the setting up of goals, which are specific pleasures to be obtained in the future after over-coming the intervening difficulties. These goals should be of two types, the long term and the short term goals. The long term goal is a guiding star, toward which an *orientation* can be directed. The high school boy who wishes to become a physician, the laborer who wishes to buy a house, the scientist who aims at finding the cure for cancer are examples of persons who orient their lives and mobilize their energies to attain their goal. The strength of their desire determines the amount of energy they put forth. A practical goal which can be achieved generally offers a greater incentive to most persons than does some vague ideal and almost impossible goal. With such an orientation, whatever the person does at the moment has a bearing on the future; and the early rising, the working late at night, the self-denial of pleasures are all expressions of energy mobilized to obtain some future pleasure.

In addition to having these long term goals, the person needs to have immediate goals which offer some prospect of relatively quick accomplishment. There are comparatively few men who can

carry on work with satisfaction and continued drive, in the face of repeated disappointments and with no temporary satisfactions. In practice one outlines the steps necessary to follow in order to obtain the long term goal, and keeps in mind that each step gives pleasure, thereby permitting the constant mobilization of fresh energy. The high school student's wish to become a physician is held as the guiding goal, but immediate energy is mobilized to be able to enter college—and then to complete each of the college courses, and then to enter medical school, and so on. Each tangible goal completed increases confidence and furnishes further incentive to carry on, so that the subsequent short time goals are obtained in turn.

So much for the vocation in everyone's life. The avocations and the spontaneous expressions of energy and pleasure form an equally if not more important part of life. From the energy mobilized by inhibitions and motivations, much energy will be created which needs release in ways other than "work." In addition there is a great amount of spontaneous energy which needs satisfaction, not necessarily along any constructive and directed lines, but in direct and simple expression. (This spontaneous energy is so-called because it is not "mobilized" but rather is an expression of constitutional drives, comparable to Bergson's *Élan Vital*.) The carrying out of an impulse as it arises, the indulgence of an idle wish, bursting into song, dance, frolic and play, are spontaneous expressions of well being (i. e., "natural" potential energy). These are methods of release which are to be encouraged rather than discouraged. There is danger for society in the insistence that all activity follow a standard pattern, for *frequently progress is brought about by the person who does not conform*. Presumably, the major restriction on spontaneous activity is the prevention of harm to one's fellow men; otherwise, restraint needs to be avoided.

As will be discussed, the prevention of the formation of excess energy which may lead to neurotic states, is primarily via relaxed attitudes¹ and decreasing one's desires to a level which is theoretically, at any rate, possible of attainment.² It is difficult to make a definite demarcation as to where one's limitations begin and capacities end; often one is capable of more than is realized, while the reverse is also true. The problem of energy mobilization is of the utmost importance, for all constructive (and destructive) activity is the result of utilized energy. *Intelligence is the guiding principle which utilizes force toward its own ends; but it is the mobilized energy which actually does the work.*

¹ Vide p. 248 ff.

² Vide p. 207.

MANAGEMENT OF ENERGY PROBLEMS

The multifarious sources of tension; *e. g.*, unsolved conflicts,¹ guilt feelings, self-intolerance,² grudge bearing,³ etc., may often, in the last analysis, be expressed in terms of inadequate or unsatisfactory energy creation and consumption. In the psychoneurotic and psychotic patient, as well as in many "normal" persons, it is possible to correct the production and utilization of energy so that the person becomes more useful to himself and to others. The set-up of our modern world is such that a vast number of persons generate more energy than they expend; *i. e.*, the demands and desires—often synthetic⁴—foisted on them by the social situation orient the organism but do not implement it; or, in other words, produce the energy necessary for satisfaction but do not channelize it. It is as though vast reservoirs of water which should and could be utilized to irrigate the waste places of life were dammed, without outlet, either to stagnate or, where the restraining wall is weakened, to offer flood peril. There *are* ways of channeling excess and pent-up energy, through vocalization, socialization, cultivation of avocations, devotion to work, etc.; but before the individual patient can work out the necessary plans, he must be inculcated with and make automatic for himself the attitude of relaxation and learn to reduce the number of his desires to what is possible of fulfilment.

RELAXED ATTITUDES⁵

Every physician is familiar with the type of patient whose tension manifests itself in spastic colitis,⁶ peptic ulcer,⁷ certain types of vomiting,⁸ paroxysmal tachycardia,⁹ asthma,¹⁰ and a whole host of similar psychoneurotic states. (This discussion proceeds on the premise that organic bases have been ruled out.) Often such persons appear "normal" to the casual observer and to their friends. I have heard physicians, judging from the quiet composure of a patient state: "He does not look like a neurotic." Tension, after all, is not simply a matter of the contracted state of individual muscle groups; muscle tension is the result of increased nerve impulses going to the muscles, and these in turn are the result of the psychobiologic orientation and emotional tone. By means of great effort it is possible to relax many muscles and to appear composed;¹¹ but actually, if the person "feels" tense or is emotionally concerned,

¹ *Vide* p. 47.² *Vide* p. 205 *ff.*³ *Vide* p. 216.⁴ *Vide* p. 173.⁵ *Vide* p. 174.⁶ *Cf.* p. 310.⁷ *Vide* p. 306.⁸ *Vide* p. 259 (Case H. H.).⁹ *Vide* p. 298.¹⁰ *Vide* p. 302.¹¹ *Vide* p. 143.

some part of his body will express tension; and so far as the therapeutic aim is concerned, such apparent muscle relaxation is of little value.

These patients suffering from unreleased energy (tension) often are the reverse of the complaining fault-finding variety; they are proud and have a strict pattern of social standards and an entirely praise-worthy code of ethics and manner of conduct toward their fellow men. They work diligently and conscientiously, refusing to be satisfied with a task until it is perfectly done. They become perfectionists¹—at the opposite pole from those who care little for the tasks they do or for the manner in which they do them. It is the over-doing and the over-expectation that result in their collapse. Many of these persons develop a high standard of living and reach personal or social success by virtue of those very traits which later result in their undoing. The force which produces tension in these persons is not the thoroughness with which they do their work; but rather the thoroughness is indicative of the fact that their total organism is constantly oriented toward expending energy. Their supply of energy exceeds the amount required by their customary tasks; hence the meticulous attention given to detail. The pattern is a vicious circle: the more demands they make on themselves, the more energy they generate, and the more there is a demand to express the energy.

In order to reduce this tension, the patient must learn to relax. However, to relax the muscles it is first necessary to "relax the mind";² the success of relaxation lies not in muscle training as some claim, but in training the psychologic (psychobiologic) attitude. Therapy consists (through analysis and discussion) in teaching the patient: (1) to understand the mechanism of his tension,³ (2) to see his problems and himself in a true perspective;⁴ (3) to realize that anger and impatience retard rather than facilitate his plans;⁵ (4) to cultivate the attitude of self-tolerance (*cf.* indifference⁶), and (5) to substitute reasonable planning for emotional demanding.⁷ Here as elsewhere, intellectual comprehension and assent are but the first step; the physician must offer moral support to the patient in his task of making such attitudes habitual and automatic. The motive behind these principles is to train the person to produce adequate but not excess energy with which to deal with his problems.

¹ *Vide* p. 267.

² There is, of course, no such entity as "the mind," but the term is of value in treating patients.

³ *Vide* p. 219.

⁴ *Vide* p. 207.

⁵ *Vide* p. 195.

⁶ *Vide* p. 205.

⁷ *Vide* p. 196 *ff.*

As an adjunct one may teach the patient (by means of a very light hypnotic state)¹ how to relax his muscular system. The patient reclines on a couch, is told to make himself as comfortable as possible, and then is told to relax his hands, his legs, his jaws, his eyes, etc. Next he is told to "relax his mind," and feel drowsy. The suggestion of drowsiness is repeated over and over. Then the patient is informed that he will feel this way every time he tries to relax, and that he will be able by himself to induce this condition. Such suggestion on many occasions is followed by the ability of the subject to relax deeply at will, and particularly after meals and on going to bed. It is important that the subject does not go into a deep hypnotic stage, for he should be aware of the way his muscles feel on relaxing and thus be able to imitate the state when he tries it alone. Occasionally several such sessions are necessary to train the subject to relax. Once he learns this technique, it is simple to suggest that he be relaxed even when he sits at his desk; *i. e.*, that all muscles be relaxed and all general tension be absent except as is necessary in the pursuance of his work. Some persons find it extremely difficult to carry out these procedures at first.

During this suggestive state, the patient is frequently told that he is no longer tense, that he regards all difficulties that come to him with equanimity, that he has the attitude of doing as much as is possible, but without being emotional. This *relaxed "attitude" does more to release tension in the muscles than does any other single technique.*

Reducing the number of unfulfillable desires is another method of reducing the number of impulses which lead to tension producing orientations. In many instances, the person has too many ambitions which in the nature of things cannot be attained at once, and yet which may create such tension over not being fulfilled as to give rise to undesirable symptoms. It is of great value to discuss the personal drives and desires (the very fact of stating in concrete and precise terms what one wishes to obtain or to avoid is therapeutic; a definite goal is thus created in place of a vague wish), and counsel the patient to modify them within the limits of capacity and time.² In this way less energy will be formed and relaxed attitudes will be more easily achieved. In some instances where the ambition is such as to be impossible of fulfilment, yet where it continues to operate, it is often possible to change the trend of the wish and desire into some related field where it is capable of fulfilment.³

¹ Vide p. 230. ² Vide p. 207 (Evaluating liabilities and assets). ³ Vide p. 83.

It will of course have been observed that the two techniques just discussed—cultivation of relaxed attitudes and reduction of the number of desires—are methods of reducing the amount of excess mobilized energy. There are positive and direct techniques as well of handling excess energy and one of the most readily accessible and effective is *vocalization*.

Vocalization of one's emotions is often more tension releasing than is a substitute or vicarious expression of them. If one is angry with another and refrains from expressing that anger, it may accumulate to form "bound" energy, which in turn may lead to rationalizations,¹ suspiciousness,² irritability,³ and that paranoid state which is an integral part of hate. Moreover the memory of the irritation serves as a continued stimulus—as effective as the real stimulus—continually to generate mobilized energy. It is often better frankly and honestly to express one's disagreement⁴ or annoyance and thus be able to forget the irritating stimulus than to "repress" it and allow the memory of the irritation to act as a persistent stimulus, producing constant anger reactions which are then repeatedly, though perhaps indirectly expressed.

If for example, Mr. A. is angry at Mr. B. because of some slight or wrong, and conceals his sense of injury but continues to harbor ill thoughts and ideas of revenge, and then becomes irritated with the institutions or people associated with B., his anger is self-reflexive⁵ and operates against himself as well as against his irritator. Anger will be expressed and continued; and irritability will be present, continuing from the one case (among others) so that the irritations are constantly generating pent-up energy. However, when the primary emotion (that is, the irritation with Mr. B.) is expressed directly to Mr. B., most of the irritation is removed and the secondary effects disappear. It is a common, every day experience to find that one is greatly relieved when the emotion is expressed, when "one gets it off his chest" as the common expression goes. This technique of releasing pent-up energy by vocalization is particularly of value in marriages⁶ wherein the friction between husband and wife is often based on minor irritations which convert the marital into a martial state. Pride, hypersensitivity, and the desire to have one's own way create difficulties which could quickly disappear in the light of expression and discussion. It is neither excusable nor desirable that one become eloquently articu-

¹ *Vide* p. 76.

² *Vide* p. 335 (Case G. N.).

³ *Vide* p. 63.

⁴ To vocalize one's pleasure tends to create pleasant emotions (self-reflexive) within one's self as well as within one's fellow man.

⁵ *Vide* p. 194 (Case K.).

⁶ *Vide* p. 166 ff.

late about every inconsequential and momentary irritation that one may feel (there are bound to be many in any situation in which persons are constantly and closely associated); but it is highly desirable to recognize the fact that even a microscopic splinter can become the source of a serious or even a fatal infection!

Too often unnecessary "scenes" are created because the persons involved do not as a rule frankly discuss their points of difference or honestly express their mild irritation over some minor situation. Instead, they repress their many small angers, permitting them to fester and spread poison so that when a break does come, the relatively unimportant precipitating factor is lost and forgotten in a welter of recrimination, abuse, parade of past mistakes, and airing of ancient injuries. The violence of expression is out of all proportion to the gravity of the immediate situation and results either in a counterattack of equal virulence or in a feeling of bitterness or rankling injustice which bodes no good for the future. Discussions, if they are to eventuate in the release of pent-up emotions, or if they are to further understanding, must be objectively concerned with the point at issue and not disguises for an attack on the other person's self-respect and pride.

Though granting the therapeutic value of "vocalization," one must realize that it is not always either feasible or possible thus directly to express and dissipate one's irritation. For example, one cannot freely vocalize one's anger at one's host or at one's employer; and such inhibiting factors call for other forms of release, some of which have been mentioned in the discussion of substitution and sublimation.¹ Though only common sense² can dictate procedure in a particular situation, it is as a general rule, better to err on the side of expression than on repression.³ Politeness, essential and born of the need to facilitate easier adjustment between men, can become a vice when overdone, and may lead to abnormal repression, stagnation, or sadism. Similarly, insufficient politeness leads to excessive irritations between men and to friction which interferes with accomplishment.

When one is thoroughly angry and because of the situation is unable to express himself, it is not always easy to sublimate this anger into "sweet and forgiving" channels. Too often persons who remain outwardly saccharine under marked irritations evidence a steady flow of malicious gossip or sadistic domination in realms which they can control. In the psychoneurotic person,

¹ *Vide* p. 83.

² *Vide* p. 124 (footnote).

³ *Vide* p. 68 ff.

these expressions of anger and hate result in chronic nagging and vicious innuendos; and are part of intense dissatisfaction with the self, and often are accompanied by many hypochondriacal phenomena.¹ The entire symptom complex is an expression in part of this repressed anger, anger which needs to be curbed in its formation and which when formed needs open and direct expression.

One of the best forms of constructive outlets for the pent-up energy is in *socialization*. Visiting with one's friends, going to group affairs, interesting one's self in organizational activities are excellent means of utilizing energy.² Too often patients become seclusive and almost asocial when their neurotic symptoms develop; and this seclusiveness creates a vicious cycle, wherein the patient has more time to think of his own ailments which thus become exaggerated, and also, because loss of contact with others means loss of the opportunity to orient one's self toward realities as others see them. The fact that patients state that they have no satisfaction in going out, or that the association with others merely makes them feel worse, should be overcome by the explanation given above; and the patients should be urged to enter social activities, despite their reluctance to do so. It will be found in the average patient that after the first two or three visits to friends, the original antipathy disappears and the patient begins to improve. Yet, the physician must persist in urging the patient, for without the moral suasion, many patients will relapse and lose all the value they gained from their contacts.

Recreation and hobbies are also extremely important energy release techniques. Moreover, recreation is a direct pleasure obtaining method. Recreation may be in almost any form; and from society's point of view, the form is immaterial as long as others are not harmed thereby. It is difficult to tell any one person how to enjoy himself; rather the person should be canvassed for the pleasures which he knows he cares for, and then the physician may be in a position to advise how these pleasures may be more constructively and enjoyably utilized. Hobbies, similarly, vary so widely and may be so accidentally determined that rather than recommend any one hobby, the physician should urge the patient to choose whatever he likes best. Energy discharge will be greatest in that hobby which is most interesting to the person. Work created for the sole purpose of helping a patient may be of inestimable value; but many of the negative results of "occupational therapy"

¹ Vide p. 281 (Case S. M.).

² Vide pp. 169 (Case F. S.); 312 (Case B. U.).

occur because it is blindly assumed that all will benefit, because some do, from a particular kind of activity. While one person may find release for his mobilized energy through physical activity; *e. g.*, in carpentry, another, having neither manual dexterity nor building interest would through the same medium but increase his tension, add to his store of unreleased energy. To be released adequately, energy needs not only "labor" but also the proper attitude. It is interesting in this connection to note the paradoxical nature of many energy outlets. It might seem that games requiring great physical exertion and intensified by keen competition would be too exciting for an already excitable person; yet they actually are relaxing both to the participant and to the spectator because they release pent-up energy. On the other hand, the apparently passive listening to music¹ may accomplish an identical end. The passivity is only seeming. A person in following the music tends by identification to swing muscularly with the music, nodding his head, tapping his feet; and even when there is no manifest movement, there is often a non-observable but yet definite movement. In many forms of music such rhythmic movements can be performed only by relaxed muscles; and tense persons, who are influenced by harmonious music, are perforce relaxed. Some sanitariums very effectively utilize dancing to music as a means of relaxing patients. Moreover in this general relaxation and harmonious appeal to the senses, the person "feels" that peace and harmony do exist outside himself and will continue to exist despite his own troubles; and by such general "feeling tone," the person puts aside his conflicts for the while. On the other hand, some types of music will stimulate persons into increased activity (*e. g.*, martial music, dance music) by reason of the tendency to make rapid and staccato rhythmic movements in time with the music. The rhythmic muscle movements can, under the influence of a skillful composer, increase to such a pitch as to make the person excited, exhilarated,² etc. The associated words with all their connotations aid in determining the stimulated person's attitudes.

It is important again to emphasize that *energy release occurs not primarily from physical activity, but from the psychobiologic orientation*. If the set of the body is such as to facilitate energy release, such release will occur on proper stimulation. On the other hand,

¹ *Vide p. 209.*

² Hence quick staccato music results in quick staccato muscle movement which, in turn, is associated with a feeling of quick movement, of exhilaration. Thus by proper knowledge of music one may "produce" almost any kind of emotion in a "normal" person.

if the person is in continual conflict severe physical labor will not be useful in releasing energy. Thus, persons may release energy in witnessing an exciting ball game, or in watching a boxing spectacle, or a bull fight, or, as occurs today in some modern nations, by concentrating attention upon some public scapegoat. The energy release in these instances is effective because the subject identifies¹ himself as the hero of the event, and projects himself into the real or imagined action, so that his body acts out (by muscle tension, by shouting, and excitement) what he envisions, and he thus secures a release of his energy which may have been mobilized to combat the irritations of daily life. On the other hand, persons obsessed with some concern, or drive, may seek to forget their troubles in physical labor; and whereas there may be some relief, the energy is so continually mobilized by the problem that real relief is not usual. This fact is the reason why, in specific advice to patients, it is important to stress the need for selecting outlets enjoyed by the person (*i. e.*, outlets toward which he is properly oriented rather than those which are merely time consuming).

Without at all minimizing the value of recreation, hobbies, avocations, social activities, and vocalization, one must in the last analysis admit that for most persons and in most instances there is no other energy outlet so releasing, so rewarding, so universally effective as work: work which requires daily arising and constant attention to duty, irrespective of the way one may feel or of his wishes of the moment; work in which one has certain responsibilities; work which is not only of value but is in itself a value. Accordingly, all males should work unless there is actual disabling physical disease. And women, despite the special role they occupy in society today, do not differ essentially from men either in their ability of accomplishment in most tasks, or in their need for release from tension. Even married women, whose husbands insist on placing a pedestal beneath them, should find some occupation to take up their time. Having served their primary usefulness in the rearing of children, women, with all the labor saving machinery now available, find time hanging heavily upon their hands.² The conventional ideas which force women to stay at home or visit day in and day out over bridge tables are conducive more to boredom and tension neuroses than to a state of well being. There are many activities, useful to society as well as to the individual person, which can supply a zest for life and for creation, which these

¹ *Vide* p. 77.

² *Vide* p. 67 (Case I.).

often highly intelligent and able married women are capable of both doing and enjoying.

It must be borne in mind that the above glorification is of *work and not of drudgery*. Our highly mechanized civilization calls for increasing hordes of human robots; and the monotonous routine performance of a task, while it may be physically exhausting, rarely serves as a safety valve for pent-up energy. Ideally speaking, one would say that whether a work is monotonous depends upon the individual point of view and that rarely should one particular task be forced upon anyone who deems it uninteresting; practically speaking, one would be forced to say that since so much of the "world's work" is dull and unrewarding for the worker, society will eventually have to provide other channels through which energy can be constructively expended.

On the other hand, almost any work which one undertakes because one is interested in it involves many tasks which are not liked but which need to be carried out as part of the total program. So often one meets with persons who by virtue of untrained habits of work, and of desires for an "easy" position, will object to various tasks on the ground of lack of interest. Fond mothers aid and abet their children in many of these idle wishes. While the individual preference should always be given as much consideration as is possible, the tendency to avoid the expenditure of energy should not be permitted to guide the waking activity of the patient. Not only adolescents present this problem; supposedly mature persons shift aimlessly from position to position,¹ with many unformed and vague wishes, and with little organized expenditure of energy.

The factor of habit training as mentioned above is an important one in the carrying out of consistent work efforts. Habits of study for example, if not inculcated in early life are difficult to develop later. The ability to work consistently is often dependent not only upon the amount of energy present but also upon the habit patterns of work, in reality conditioned habit patterns, which facilitate the systematic utilization of energy. This force of habit is important as prophylaxis in the training of children for their adult life. It is difficult to establish the habit in later years.

The influence of an *incentive* in the mobilization of energy and in its persistent direction cannot be over-exaggerated. The very concept of systematized effort, which is so necessary for the advancement of society, implies that the effort is directed toward some goal. When such a goal will in some measure benefit the

¹ *Vide* p. 66 (Case U. K.).

person, the amount of energy expended in that direction will be greater than if the goal has little relation to the person. In our changing society, however, the possible goals available are becoming more and more limited; so that personal satisfactions in the ultimate goal tend to become more and more identified with social gains. The minimization of the ego-importance in such instances will undoubtedly subtract much effort from many persons, and society will lose thereby. In the therapy of patients, the physician should attempt to direct the person toward a goal, which will furnish some personal satisfactions should it be obtained rather than simply urge the patient to do something because it is generally recognized to be "good." The force of incentive should always be made use of.

Another means of mobilizing energy is through association with persons who are active. If the deficiency is primarily a psychologic one, the problem becomes one of creating desires or demands which the patient will recognize as compelling. Much human behavior is imitative; so that often the person apparently lacking sufficient native energy for personally initiated effort, will, if thrown into association with others who are active, make their interests his; and the stimulation having been provided, the organism will orient itself by the creation of energy to meet the new demand.

Psychotic and psychoneurotic patients are notorious for their failure to utilize such *constructive* methods of energy release, and as a consequence develop symptoms which are often expressions of the aberrant and unorganized methods of release. Many such patients would not develop a personality disorder if society avoided inhibition of action which results in the formation of energy; for the less energy created, the less irritating release there would be and the better the adjustment. Feeble-minded persons for example who are subject to but unable to meet the demands of adult society mobilize energy which is released in the form of behavior disorders. Psychopathic personalities not infrequently may be unable to adjust in open society for the same reason and yet be almost model citizens in a small controlled hospital group where little is demanded of them.¹ Many such persons and others in related categories are constitutionally unable to utilize constructive techniques for energy release; while many other patients, the psychoneurotic group particularly, just do not know or have not learned how to use the proper methods of energy release, and yet can be taught how to use constructive instead of destructive mechanisms.

¹ Cf. p. 453.

Therein lies one of the bases for the cure of many psychoneurotic phenomena.

The social implications of the foregoing discussion of energy mobilization and expression are significant and far reaching; for, inasmuch as society stimulates the mobilization of energy, it has perforce the responsibility of channeling and directing the energy toward socially valuable goals. As has been previously stated, the social environment superimposes on man countless desires and demands so that he is forever dissatisfied with his status quo, and is accordingly constantly mobilizing energy with which to change his situation. Progress, with its increase in the standards of living and thinking, is essentially based on this type of dissatisfaction. Left to himself, in the midst of plenty, man would do little and progress would be absent. The "laziness" of man has its origin in the inertia which is a tendency inherent in inanimate as well as animate objects. Inertia tends to bring all forces to a balanced dynamic state, and where there is any friction (as is the case with inanimate objects) or obstacles (as with animate things), this balance eventually results in cessation of activity. (The Freudian concept of the death instinct, and the desire of man to return to the safety of the mother's womb, is a highly poetic manner of expressing such a tendency toward inertia.)

It is a fundamental law of physics that energy cannot be created; but it is possible to mobilize energy which is latent so that constructive work can be done. Our civilized state has without conscious purpose created situations which tended to result in energy mobilization, and also in an almost equally unconscious fashion rewarded and encouraged energy expression which has been utilized in the first place, to meet the self preservative needs of the individual man and which in the second place has contributed to the welfare of society. Training, schooling, learning of skills, provision of pleasure giving outlets, offering incentives which will enlist man's endeavors toward socially desirable activities, are all methods by which society can channelize constructively the energy mobilized by the necessary (sometimes unnecessary) social and personal frustrations.

CHAPTER XIII

PROGNOSIS AND THE CURVE OF IMPROVEMENT

THE prognosis of patients suffering from a psychoneurosis varies with many factors. These factors include among others: hereditary predisposition; maladjustment in childhood; an exacting, excessively conscientious personality, or conversely an overly self-indulgent and unself-disciplined personality; the age of onset; environmental stress; sex maladjustments; coexistent physical disease; fatigue; the presence of manic-depressive depressions; the amount of brain damage, as for example in senile patients and in patients with brain injury; the duration of the neurosis prior to treatment, etc. In order to forecast exactly the outcome of such an illness, one would need to know in great detail much that is difficult or impossible to ascertain, for the variations and modifications are as individual as the individual patient. The following statements, then, must be understood to represent only a general picture, the broad outlines within which the particular prognosis will be made.

The prognosis as to life is good. Patients as a rule do not die of a psychoneurosis. However, this statement is not altogether true. Patients may die as the end result of a neurotic symptom, for if the cardiac musculature is poor, for example, they may die of the exertion accompanying emotion. Some patients develop essential hypertension on an emotional basis, and the apoplectic stroke which carries that patient away may truly be said to be the result of emotion. Hysterical asthma may so affect the person's breathing and respiration that pneumonia may set in more easily than is usual. Chronic mucous colitis may succeed in so lowering the patient's resistance that he is carried away by an infection which he could ordinarily resist. A peptic ulcer may be so aggravated by tension as to facilitate the onset of perforation and hemorrhage. The neurosis itself may seem relatively free from the final responsibility; but it nevertheless may indirectly be the determining one. In some instances, indeed, it may bring about actual death.

Mrs. H. H., aged sixty-seven years, was in good health and boasted of never having been ill or in a hospital. She was quite deaf, but could read lips and understand words spoken very loudly. Her husband, with whom

she was deeply in love, was killed in an automobile accident. The patient was prostrated with grief, and developed vaginal bleeding. The diagnosis of myomata of the uterus was made, and a vaginal hysterectomy was performed. She made an uneventful recovery, except that she developed persistent vomiting. No cause could be determined for this vomiting, in which not even fluids could be kept down. She was fed intravenously, but her strength gradually grew less and less. She called her children to her side and told them that it was best that she go and not be a burden since her husband had gone. The vomiting was a psychogenic vomiting. Attempt at psychotherapy failed because the patient had lost all desire to continue with her existence and she refused to discuss her attitudes. Her deafness made it impossible to break down the barrier of her indifference and the patient died soon thereafter from exhaustion and malnutrition. Autopsy showed no pathology which might have been of importance in producing the vomiting, except the recent operation, which was significant only as a contributory factor to the psychoneurotic vomiting. Death in this case was the end result of a neurotic symptom.

Prognosis as to recovery may further be classified as: (1) complete recovery, or (2) partial recovery. *Partial recovery* may occur when, though the symptom is temporarily removed, the basis of the neurosis is still uncorrected; and thus the same symptom may recur again under mild stress; or some other psychoneurotic expression of the underlying tension may come to the fore. This type of recovery is common; and may be obtained by many and devious methods. So-called miracle cures are on the basis of suggestion,¹ but their permanency is open to question. Strong suggestion either directly or in the form of medication or operative procedures, may also bring about temporary remissions. The author has seen many psychoneurotic patients with no organic pathology, on whom thyroidectomies, cholecystectomies, appendectomies, coccyxectomies, and other operations were performed, primarily because of the insistence of the patient that "something be done" about his complaint.² Many of these patients will undergo severe operative procedures rather than face the conflicts which while dissociated and split off from the symptom are at the basis of their emotional overtones and their pains.³ On the other hand, removal from an irritating situation such as occurs when one takes a vacation, often results in temporary alleviation of the symptom, which recurs with the return of the patient to his former surroundings. In children this experience is extremely common: the child who represents a marked behavior problem will often do very well in camp away from his family, but will have a complete recurrence of his symptoms once he returns home. Some patients, however, can "manage

¹ *Vide* p. 222.² *Vide* p. 312 (Case B. U.).³ *Vide* p. 279.

to stick it out" in a neurosis producing situation provided they can "escape" several times a year by taking vacations. However, where such relief can occur, there is little seriously wrong with the underlying personality. Severe psychoneuroses can never be dealt with in such a simple manner. It must seem obvious that the only treatment that will permanently remove any symptom is that treatment which attacks the cause; and since the "causes" of the neuroses usually have their roots in the diseased personality, the cure must come by changing the diseased parts for more healthy ones. One should always gaze critically upon any miraculous changes wrought overnight; for while they do occur, they rarely are permanent. As mentioned previously, by use of hypnosis, I have frequently removed the presenting symptom in patients on their first visit,¹ but these symptoms almost invariably return and are not permanently removed until the more fundamental bases are reached.

Mrs. H. I., aged forty-three years, was referred to the dispensary for chronic alcoholism. The patient was interviewed for some twenty minutes, and a brief review of her problems made. A general "mental hygiene" formulation was given her; and she was urged to view and deal with her problems in a direct and frank fashion, instead of trying to avoid them by the use of alcohol. She seemed greatly impressed. Two weeks later a letter was received from the social agency caring for this patient, stating, "Mrs. H. I. reports phenomenal results from the treatment." Nothing was heard of the patient till three years later, when the agency asked that this patient again be taken for treatment since she had been drinking for a long period of time.

What had happened during that one interview was: (1) an intellectual appreciation of the method suggested, but no "dynamic conviction"² which would enable her to implement her new attitude; (2) strong suggestion as to her ability to do without alcohol should she follow the method of mental hygiene, the effect of the suggestion wearing off in a short period of time; (3) a temporary lessening of the emotional tension surrounding the patient's problems (and hence the cause of the drinking) by giving the patient a general perspective of her liabilities and assets, putting her problems in their rightful place; and (4) the focusing of her efforts not at stopping the alcoholism but at the removal of her emotional difficulties behind it. These influences nevertheless were quickly dissipated in the absence of the sustained therapy necessary to make them part of the patient's personality. Such brilliant initial results are always impressive but can be truly evaluated only by follow-up studies.

¹ *Vide* p. 38 (Case K. U.).

² *Vide* p. 196.

Partial recovery may occur in the setting of treatment for a complete recovery, and may be sufficiently adequate so that the patient can adjust on a social level and be able to carry on with routine duties of work or household activity, even though he does not fully complete his therapeutic course. Such temporary removal of symptoms is rather an amelioration, and is of value in that it permits the patient to be concerned about work and social affairs which in themselves are of value. In a number of patients, once one is able even temporarily to remove the symptom so that the patient can return to a normal routine of life, spontaneous improvement will continue, and the patient may make a seemingly complete recovery. Whether the recovery is or is not complete depends on the degree and amount of personality readjustment that has occurred during therapy or during the influence of the demands of the "normal" environment.

Partial recoveries may occur without any formal psychotherapy. In psychotherapy one tries essentially to make the person normal¹ by a critical examination and retraining of the attitudes and reaction patterns. In ordinary society, however, normal attitudes and reaction patterns are constantly voiced and, more important, acted upon; this "living example" of "normal" persons in itself tends to be corrective and may in many instances influence the patient favorably. In fact, *one of the most important factors in the cure of a disturbed personality is a normal, relaxed environment.* This relaxed environment does not necessarily mean one of peace and quiet. Places of rest may be very beneficial, if other persons in the company set examples of relaxation. "Retreats" are used for this purpose and they have the additional value of reestablishing a more general orientation toward life, and a better perspective which relegates the person's own particular difficulty to the small corner where it really belongs. This change is brought about in part by prayer and faith, which constitute a powerful influence in changing the person's attitude. Of great, though often unrecognized importance is the fact that in such a "retreat" the person is surrounded by like-minded persons who by their very community of ideas offer moral support. When this "like-mindedness" is unhealthy, how-

¹ The word "normal" whenever used in this book, means not merely average or usual. Normalcy consists of a type of adjustment which often, though by no means always, makes for a minimum of discord between the person and society. Members of society in the modal range (*i. e.*, between the extremes) have managed to work out a fairly "livable" adjustment. Normal adjustment does not mean the most perfect adjustment possible. What is "normal" for one person or group may be abnormal for another. Time, place, group, and previous state all enter into determining what is "normal."

ever, detrimental effects will be intensified. Many of the converts to various oriental philosophies are enthusiastic in their praise, and claim such marvelous results because in these religious experiences they have found peace and quiet, and they have been able to shelve their more or less petty strivings by gaining a perspective which demonstrates how small a role the person or even his group plays in the world as a whole and in the endless passage of time. Unless, however, the philosophic attitude becomes an implemental part of their personality, and unless the specific emotional disturbances at the root of their neurosis is removed, persons who experience a religious conversion often relapse to their former state; and seek solace elsewhere. Often too, such changed attitudes are of value only as long as the person remains in surroundings conducive thereto; and as long as he is encouraged by the presence of others who are striving for the same goal; but on leaving such environment, he soon falls back to his old ways of thinking and feeling. Then too, in those in whom the emotional disturbance is great, relief afforded by the strong religious philosophy is only temporary—for the cause of the difficulty continues to exist.

Mr. K. M., aged thirty-five years, reared in a rigidly orthodox family, was intensely unhappy. He had always been fearful, more of the possibility of showing fear than of dangerous situations themselves. He was a quiet person who preferred his books to people, yet when alone he was tortured by doubts of his ability, and angry with himself for his lack of accomplishments. He was afraid of "sin" to the degree that he would weep bitterly at confession over childish untruths he had told in his games with boys. He was extremely kind and tolerant of others, but of himself he was almost masochistically intolerant. He did excellent work at school, and entered a retreat before preparing for priesthood. When he first came there, he states that a peace settled over him such as he had never known and he was almost supremely happy. He prayed frequently and forgot about his own "petty inadequacies" in consideration of the problems of mankind. After several weeks, however, he found thoughts intruding which had been present before and which he was trying to escape. When he saw worldly persons he began to think of himself; and the problems of sex came strongly to the fore. At the end of the second month, the patient was in a state of greater agitation than when he went into the retreat, for the sense of "thinking unholy thoughts" was added to his former fears. This experience occurred when he was at the age of twenty. He finally became an alcoholic.¹

But for many persons, relaxation of spirit and a more effective reorientation of self in relation to others and to time can be brought about in certain situations; *e. g.*, in camps and vacation spots, where strife and stresses are minor, and normal healthy expression

¹ *Vide p. 473.*

in play and fun provides outlets which the person can carry back to his daily and routine life. In a similar manner, removal of the subject from an irritating situation, and permitting residence in a non-stress providing place will often produce partial cures of psychoneurotic symptoms.

If a "normal" person is wearied by the work and strain of life, if his efficiency is lowered by fatigue, then a "retreat" whether it be found in cloister or camp, in philosophical or physical gymnastics may be of inestimable value. It offers rest and refreshment; it enables him to return with new zest to whatever may be his task and problem. If, however, it is used as a permanent escape or as a substitute for facing his actual situation, then inevitably it fails.

Partial recoveries may continue for long periods of time if the person is intense enough in his attitudes and is able to bury himself sufficiently in whatever philosophy he has accepted. Yet even during this period of remission from his emotional ailment, the patient still is not completely recovered, for his recovery tends to fail quickly when he takes up his routine and daily tasks in the community at large. Some groups try to overcome this handicap by making their constituents spend from one to several hours daily reviewing tenets of their special philosophies; but this is not an adequate substitute and the original relief dwindles considerably in time. Permanent relief from psychoneurotic symptoms can come only when the etiologic factors have been unearthed and the existent attitude of the patient toward them has been remedied.¹

One of the most important elements in partial and even in complete recoveries and the prognosis for their continuance, is the ability of the subject to shift the responsibility² of his actions to someone else. In the relationship of the patient to the therapist the patient is often relieved in proportion to the degree to which the therapist will assume the responsibility for directing a course of action, and basically *the patient feels relieved because someone else makes his decision for him*.³ Many persons are immensely relieved even when told to do things which are obnoxious to them, if by so doing they can be relieved of thinking about their conflicts or deciding which pole of their desires should be carried out. It is this putting in abeyance the conflictual drives, that quiets the emotional tension about the drives, and thus secures relief for the

¹ Vide p. 130.

² This tendency to perform unpleasant tasks rather than take the responsibility of making a decision on some forbidden topic is found too often in some totalitarian countries.

³ Vide p. 197.

patient. The more effectively the therapist can succeed in doing this at first, the greater will be the relief. In psychotherapy, however, it must be remembered that such release from tension is only the initial stage during which adequate mental hygiene may be incorporated into the patient's personality; and is to be succeeded by the stage of *training the patient to accept responsibilities and to be self-reliant*. In many cults on the other hand, this first stage is never passed, and the person remains bound to and dependent on the central figure of the cult; and although temporarily aided, remains only partially recovered and forever unable to make his own decisions and supply his own faith.

Even when the proper technique is followed, and an effort is made to resynthesize the personality to a more healthful state, one may fall far short of complete recovery. There are many elements which militate against perfect results, some of which are inherent in the personality, some of which are inherent in the environment, and some of which are inherent in the therapeutic situation.

One of the most difficult factors is the *hereditary*¹ one. Little is as yet known of the subject but it may be easily understood that when the substance is poor, the results of molding that substance cannot always be satisfactory. Feeble-minded patients springing from a long line of feeble-minded ancestors can rarely be made into "intellectual giants." The manic-depressive patient, subject to intense moods of elation alternating with intense moods of depression, is often the end result of his forefathers, and often is relatively unmodifiable by therapeutic efforts.² In the psychoneuroses this clear-cut picture of hereditary influence is less obvious, while the very nature of the illness emphasizes the importance of training elements as well as heredity; yet clinically, the role of heredity seems indisputable in its significance. The alcoholic, K. M.,³ whose drinking seemed to be the result of emotional maladjustment, and who was later helped by psychotherapy, sprang from a line of alcoholics: his father and his uncle died as the direct result of alcoholism, his cousin and his brother both were drunkards. The strain which drove this man to drink may have been environmental in large part; but while it is difficult to prove, it is likewise illogical to dismiss as entirely non-contributory, the familial tendency to drink. Similarly Miss S. G.,⁴ who had a severe obsessive compulsive neurosis gave the history of a sister who had a "break-down" at a similar age, of a mother who had "breakdowns," and

¹ *Vide* p. 343.

² *Vide* p. 400.

³ *Vide* p. 263 (Case K. M.).

⁴ *Vide* p. 183 ff (Case S. G.).

an aunt who was extremely neurotic. It is impossible to give in specific proportions the relative importance of heredity and environment, for both undoubtedly play important roles; but when one meets with such a family history, one can understand why the emotional illness is of such intensity and of such long duration. The prognosis in these situations is often the prognosis of what has happened to the forebears.

*Emotionalism inculcated in early childhood*¹ may remain for the duration of one's existence, although its intensity may be ameliorated by psychotherapy. The child's personality is very much like soft putty, plastic and easily malleable. Yet it quickly becomes set and hardened, retaining all the impressions inflicted on it during its plastic phase, and exhibiting in adult life many reaction patterns which are but the expression of the formative ruts. These *childhood influences are not so much specific memories, but general reaction patterns.*² Thus the child may grow up with a tendency to fearfulness, to self-sympathy, to over-compensation, etc. which attitudes will manifest themselves in all spheres. Later in childhood, specific emotional discharges will occur on the basis of their general pattern but in relation to specific stimuli; so that there will be finickiness about certain foods, hates directed toward specific objects, over solicitude toward oneself or toward certain persons, etc. The earlier in life the emotional force has its effect the more general will the reaction of the patient be later in life; and the more difficult to alleviate. Earliest memories of most persons begin after the age of four, five, and six years;³ and as a consequence, it is difficult to determine from the patient just what role was played by various experiences. For research purposes, direct observation of children and of the effect on them by their parents is far more reliable for gaining information than are many so-called "memories" in adult life. Then, too, one must be careful of "retrospective falsification" wherein what is remembered as having occurred is incorrect.

Thus one schizophrenic patient stated that when he was in school some boys pushed him with deliberate intent to harm; yet when this patient was asked whether he knew at the time the incident was supposed to have occurred that they wished to hurt him, he replied that he did not, but that it "just came to him." In other words he was reading meanings into events which may not even have happened. It is difficult to tell whether this same unconscious falsification is not characteristic of many of the patients' accounts of what they did before the age of five.

¹ Vide p. 52 ff.

² Vide p. 174 ff.

³ Psychoanalysts maintain that patients can remember what their emotional states were at two and three years of age.

One of the forces which are inculcated early in life and which tend to make for a guarded prognosis is the drive to exaggerated preciseness, definiteness, certainty, and thoroughness.¹ These qualities are extremely valuable to the person as well as to the society in which he lives; but when they become intensified to the point where the patient is emotionally disturbed at not obtaining perfection, they are conducive to rigidity of personality and to difficulty in molding. In many such persons, the necessity for precision has become a fetish, and operates habitually and automatically. Generally this trait is the result of early environmental inculcation; and these patients may "crack" under the pressure of their own drives. Perfection in action is a matter of degree and it can never be obtained in absolute form by any man; yet many persons demand of themselves, the impossible.² They tend to lose their plasticity; and when psychotherapy is begun, one encounters great difficulty in "softening" this rigidity into "normal" human plasticity. It is this group of patients who often are subject to "smiling depressions," wherein they are deeply depressed internally but have learned to present a composed and pleasant exterior. It is this group that is particularly liable to suicide and, therefore, to a guarded prognosis in therapy.

Will power is a term which has fallen into disfavor, yet the principles involved in it are of great value in psychotherapy. The exercise of will power consists in the forcing of one's self to do that which should or must be done, irrespective of whether one wishes to do it. Will power is subject to many modifications which in themselves may be extreme, and harmful: variations from the over-indulgent, perpetually self-gratifying hysterical woman,³ to the unyielding, uncompromising, dogmatic "iron-willed" tyrant.⁴ Yet between these two extremes, there is room for the exercise of *will power*, and it forms *the basis for the self-discipline essential to life at a high social level*. In using "will power," the person voluntarily sets up standards which he desires to obtain, usually the desire being an idealized wish (goals forced on one are in another category); and often the steps necessary for accomplishment of that wish are difficult, unpleasant, or even distasteful. The ability of a person to hold to such a line of endeavor is roughly a measure of his will power, and it is of great aid in the overcoming of many unhygienic emotional habits. When one encounters a patient who can force himself to follow the basic principles of mental hygiene,

¹ *Vide* p. 214.

² *Vide* p. 205.

³ *Vide* p. 67 (Case I.).

⁴ *Vide* p. 215 (Case D. I.).

⁵ *Vide* p. 220.

cures will come far more quickly than if he habitually follows the desires of the moment and shys away from difficulties. The amount of effort or the will which a patient can exert is of prognostic significance.

However, a word of warning is important. It is not easy nor at times possible, simply by an effort of will to "forget" certain obsessions. In many patients suffering from anxiety states, with symptoms involving the heart and gastrointestinal tract, one reason for their symptoms is the attempt to control emotional drives purely by an effort of will. Such efforts create tension, and many patients suffering from a depression¹ may, by the condemnation of others or even of themselves, be driven to suicide. In manic-depressive depressions, patients frequently complain of having "lost their will power." In general it may be stated that where the symptom is the vicarious manifestation of some underlying conflict, the "will" to forget the symptom is exceedingly difficult to carry out, unless at the same time there is an effort to understand the causative psychologic mechanisms.

The *age of onset* of symptoms in the neurotic is of significance. In the psychoses the earlier the onset of the illness, the greater, as a rule, is the potency of the hereditary element.² In the psychoneuroses on the other hand, the symptoms are often the reaction to a situational stress,³ and once this stress is terminated, or the person trained to deal with the stress without being disturbed, the personality reorientation may go on in a normal fashion. Behavior disturbances may be particularly frequent at puberty, and depressed symptoms may appear in the forties, as the result of diminished personality resistance to the stress of physiologic changes at these periods; but even here, the determining forces of attitude and stress actually are the important elements in producing the neuroses. These periods in life are associated with physiological changes, and the personality which may previously have been able to get along by effort, fails to adjust under such stress.⁴ Symptoms at these periods indicate either that the physiologic changes are unduly strong or that the personality is poorly balanced. Prognostically, it may be said that if one does nothing to ameliorate the pre-neurotic personality, and granting that it does not become worse, the neurosis will disappear and the former adjustment will be reached with the cessation of the physical changes. Such a person, however, remains potentially neurotic, and will be precipitated into an illness should sufficient stress arise. Indeed in patients

¹ *Idem* p. 406. ² *Cf.* p. 265. ³ *Idem* Ch. VIII. ⁴ *Idem* p. 400 (Case K. H.).

suffering from a manic-depressive depression, neurotic traits may come to the fore during the depression and continue long after the depression has disappeared.¹

The sudden onset of a neurosis following a strong precipitating stress carries a good prognosis; for the implication is, in these instances, that the personality itself is relatively little at fault, and that when the stress is removed, the symptoms will clear up. The residual emotional trauma occasioned by this stress, may or may not remain; generally if it is treated soon after it occurs, it will disappear. On the other hand, the less obvious the precipitating factor, the more severe the neurosis will tend to be.² This severity is the result of two forces: first, that of the greater susceptibility, in general, of the personality even to minor stresses; and second, that although the stress may be severe, and its very lack of obviousness may indicate that it is more of a pride or personality wounding factor (*e. g.*, lack of attention from one's husband) and less of a direct attack upon the person (as for example occurs in financial difficulty); and therefore it will be less easy to approach and remedy. In reality this second reason is a corollary of the first, for the severity of the stress depends upon the sensitivity of the patient.³ When a patient who apparently has financial security, what appears to be good domestic situation, and no physical defects, yet suffers from neurotic symptoms, then the cause of those symptoms must lie in deepseated emotional conflicts, which have finally culminated, or which have been unduly intensified by some trivial incident. When a patient complains of suddenly developing a neurosis over some trivial incident, the physician may suspect strongly that the personality was predisposed to it, and that if not this incident, then some other would have precipitated the condition.

Mr. D. G.⁴ developed intense vertigo, the result of worrying about the possible loss of his position. He had good grounds for concern. However, when he was shown how to handle the situation, the symptoms cleared up quickly.

On the other hand:

Mrs. K. T.⁵ was seemingly well, until she went to a motion picture where suddenly she became very frightened at some scene, and had to leave. Since that time she had been very emotional, fearful of leaving her home and suffering from the syndrome of anxiety attacks. In point of fact, her difficulty had very little actual relation to what she saw at the theater. That incident was so trifling as to be practically unrelated to her illness. On

¹ *Vide* p. 415.

² *Cf.* p. 404 (Case C. C.).

³ *Vide* p. 157.

⁴ *Vide* p. 198 (Case D. G.).

⁵ *Vide* p. 32.

the other hand, the emotional disturbance existing in this patient was so strong that any incident would have brought the illness to the fore. Deeper personality studies had to be undertaken to determine the bases of her condition, and many months were spent in retraining the constitution so that it could be more adjustable.

Recovery rate may be greatly impaired by *continuation of the stress in the environment*.¹ If a child continues to live in a home full of strife and anxieties, his behavior problems will rarely clear up easily. If a woman develops neurotic symptoms on the basis of her husband's drunkenness and infidelity, her neurosis will tend to remain if she has to continue living with him. It is possible at times to modify the person in the environment; but here again, everything depends on the intensity of the irritating forces.

Disturbance over such stresses as accompany *sexual maladjustments*² is often difficult to treat. When a woman is married and her husband for some reason or other fails to satisfy her sexually, she may develop a neurosis on this basis and find it difficult to readjust. Occasionally, the development of outside interests will suffice to permit the escape of tension accumulated by the unreleased sex tension;³ and occasionally, only the advent of increased age, particularly after the menopause,⁴ is sufficient to still the emotional tone aroused by unfulfilled sex desires. Too often, however, the patient goes along on a level of superficial adjustment without any real cure. In many instances, the desire for actual sex contact can be satisfied by receiving much loving attention and devotion;⁵ for women who are unsatisfied sexually often feel that the reason is their husband's lack of interest in them.

The sex problem is different in unmarried and married persons, because in the former there is not the constant contact with stimulation and the constant expectation of that which "should occur." Under comparable circumstances the unmarried person can divert more of his or her energies into other spheres in a more satisfactory fashion. It must not be understood from this statement, however, that marriage or lack of it is the determining factor; for very severe maladjustments can and do occur in either situation. Society has as yet not found an adequate solution of this basic and fundamental drive; more needs to be known about how and when to curb it, and how and in what manner it may be developed so that its expression is not inconsistent with the highest development of man.

¹ Vide Ch. VIII.

² Vide p. 166 ff.

³ Vide p. 169 (Case F. S.).

⁴ Vide p. 167 (Case H. I.).

⁵ Vide p. 113.

Mrs. I. L., aged forty-five years, criticized her husband and his friends constantly. Her biting criticism developed to the point that no persons ever came to the house, and they were rarely invited elsewhere. Her husband was a sociable person who was the manager of a large farm, was well liked and very efficient. He had worked at this place ever since his marriage, and had developed it to be the admiration of the countryside. He could not tolerate his wife's behavior, had threatened her with divorce, sent her away to her sister in a neighboring city, given her a long vacation in Florida, and done everything else he could think of from extreme kindness to the greatest strictness. He was an eminently sensible man, kindly and tolerant in his way but a perfectionist and intolerant of his own, and often of others lack of thoroughness.

When first married they were happy, but shortly afterward her nagging and criticizing tendency developed. She found fault with everything and everybody. Even in a situation which apparently demanded nothing but praise she managed to put in a damaging word. In the last four years this attitude had become intolerable.

The difficulty, in essence, lay in the patient's disturbance over sex. She was apparently normal in her desires, but her husband, although physically strong, had little sex desire. Sex relations once a week were sufficient for him even during the first year of marriage; and since then his desire had become progressively less. He denied having extramarital affairs and since she "checked on" his every move, she could confirm this statement. He simply was without great sex desire and preferred to spend his time in work or in large parties. The patient on the other hand desired actual sex contact more often. Not receiving it, she became irritable and the expression of her irritability took the form of criticism. A vicious cycle was thereby produced. The more she criticized, the less affection her husband had for her, and thereby the less sex desire he had for her; the more infrequently they had sex relations the more she criticized. In the last four years (he was fifty-three) he stated that he was so incensed at her irritability that he could not bring himself to have sex relations with her. It is an interesting proof of his lack of sex drive, that he could also go that entire time with no sex contact. His wife, constantly suspicious was with him constantly (they worked and lived on the farm) and became more and more enraged at him, and by irradiation at all others.

In therapy, not only was it pointed out to the patient that her emotional unrest lay at the bottom of her criticism, but she was also urged to seek outlets in social activities and her husband was asked to cease his "abstinence." In spite of his assurances, he made no attempt to "be with his wife" and although her symptoms were somewhat ameliorated by psychotherapy, she tended to revert to her former self. The patient stated that she felt that he didn't care for her, and that she was just tolerated in the house, but was not loved as a wife should be. She further stated that at this age she had less sex desire than formerly, and that she wished more tenderness and affection than actual physical contact. An effort was made to ameliorate her anger against her husband by explaining to her, that he had not avoided her, at least early in their marriage, because he disliked her, and that though he was strong physically, constitutionally he had little sex desire. She had to learn that this lack of desire was not a personal affront, until later in their life.

She was to try to understand him, and not be angry at him. This advice was given in an effort to minimize her resentment, and to have her make an effort to avoid being irritable. The husband, on the other hand, was urged to give his wife as much attention as possible, and to be particularly considerate of her even in the face of irritating statements.

The patient was followed for several months, and the husband reported an improvement but not complete rehabilitation.

Sex difficulties have many ramifications, as illustrated in the following case, and are always difficult to treat.

Mrs. T. K., aged fifty-three years, had a severe skin ailment over her wrists. Nothing that the dermatologists could do changed its appearance or intensity of itching. The diagnosis was "neurodermatosis." She had consulted many physicians in all fields and finally came to the psychiatrist.

She enjoyed being a housewife. She liked to cook, to prepare for parties, and reveled in the fact that she held an excellent position in her local society. Her husband was well thought of, and was a prominent architect. He was short tempered at home, in sharp contrast to his even disposition away from home. Ten years ago, an anonymous telephone call had warned Mrs. K. and on investigation she found that her husband was "having an affair" with his stenographer. She would have left him and sought a divorce, had it not been for pride and the knowledge of the gossip which would be caused thereby. She became nagging; and he, his conscience troubling him, developed a defense mechanism which made him sensitive to the slightest insinuation. Moreover, he ceased to have sex contact with his wife, again on the basis of being so sensitized by the scandal of his affair, that he had become practically impotent in the presence of his wife. It is an interesting note, on the actual workings of the sex impulse, that during his affair, his sex activity with his wife had been greater than usual. The patient had thus an added emotional difficulty: not only the remembrance of his straying from the path of virtue, with its implication that he cared more for someone else than for her and that she was insufficient to satisfy him, but also the actual deprivation of sex contact which she had always enjoyed in a normal fashion, and which she doubly desired now because its lack implied an insult to her. In spite of her injured pride, she still loved her husband. In this setting, the skin lesion developed and under tension, she scratched at it unmercifully. Any healing that might have occurred was given no chance. Again, an interesting sidelight on the expression of tension was her smoking of innumerable cigarettes, lighting one off the tip of the other. The psychiatric problem was then twofold: one to remove from the patient her constant condemnation of her husband for an act which, however greatly it had made her suffer, should not on the other hand be permitted to ruin her life; second, to deal with the husband and similarly remove from him the intense feeling of guilt and his abnormal sensitivity which was at the basis of his relative impotence. In practice, the difficulty was great for the patient was willing to change, but the husband was adamant. The patient finding her husband's unwillingness to change, quickly reverted to her former atti-

tude. For a while she obtained slight relief from tension by an enforced changed philosophy, but this relief was partially dissipated. Superficially, the two lived together harmoniously; in private there was constant bickering.

Improvement through psychotherapy is less likely to occur in these cases than in other types of neuroses, for there is a definite sexual drive which calls for satisfaction. Various channels may be devised to release the sex tension but they are after all sublimatory, and therefore offer only an attenuated satisfaction. When in addition to suffering from this unfulfilled need, the person has come to surround sex with a halo¹ and to overevaluate its psychic aspects, the problem of therapy becomes exceedingly difficult. Treatment should be directed toward managing the marital situation where possible, toward redirecting the person's energy into other channels,² toward removing by psychotherapy all the unnatural and artificially created ideas about sex,³ and finally by a lessening of the person's general tension,⁴ which in itself tends to aggravate any situation. In those instances where the mate refuses to cooperate, therapy is made doubly difficult because, as stated above, the constant sex stimulus is present and implicit in the marriage relationship, and is difficult to forget. Moreover where the sex drive is innately strong, many of these suggestions will fail. In the cases cited, the factor of wounded pride over not being loved as "one should be" also played its detrimental role, and the tension resulting therefrom was one of the bases of the psychoneurotic complaints.

Solutions of sex difficulties are easier in "extrovert" (social, jovial, active) types of personalities than in "introvert" (shy, retiring, dreaming) types for two primary reasons: first, that in the former, the person finds it easier to become interested in activities outside himself; and second, that the introvert personality tends to daydream more and surrounds the sexual act with emotions and attitudes which have no counterpart in actuality. Although this statement is generally true there are many exceptions and variations.

Mrs. J. K., aged thirty-four years, complained of typical anxiety attacks. She woke in the middle of the night, was fearful of impending death, found her heart pounding and had a heavy oppression on the chest. During the day she was tense, anxious, and "nervous." The patient had been married for six years, had two children, and a husband who was out of work more often than he was at work. In the past three years, her husband had been

¹ *Vide* p. 111.

² *Vide* p. 248.

³ *Vide* p. 125.

⁴ *Vide* p. 131.

particularly desirous of avoiding having more children and so practiced coitus interruptus, as a birth control measure. This technique of withdrawal of the penis just before orgasm resulted in an interrupted orgasm for the patient and she found herself crying and irritable after sex relations. It was then that the symptoms of anxiety appeared. Her husband tried to use contraceptives but disliked them intensely; and when the patient used a pessary, she found herself just as irritated. She began nagging her husband and developed a temper which she had not had before. In the discussion, the patient in one breath denied that she was interested in sex, and in the next, said that it was the basis for her nervous symptoms. This contradictory statement is common in psychoneurotic patients in general and particularly in situations where sex is involved, often because of the conflict within the person between "that which one ought to feel" and "that which one actually feels." In this instance, the patient's difficulties were explained (with her permission) to her husband, and he was asked to try to substitute in some measure for the sex difficulty, by increased personal attention to his wife, personal attention which consisted not necessarily in giving gifts, but in thoughtful remembrances, and commending and appreciative remarks. Secondly, the patient who used to be a salesgirl, was urged to seek a similar position even if the wages she earned went in large part toward the upkeep of a maid to take care of the children, since having a position would get her out of the house, and provide an occupation which would take her mind off herself as well as provide some extra funds. This suggestion was made only because the patient did not particularly care for housework, and on the other hand, did not mind outside work. In the third place, she was urged on returning home, after the children were in bed, to go out with friends, or to have friends come to her house, for this social life would give her husband and her a greater community of interest. This patient's social tendency permitted her to carry out this prescription with pleasure. In the fourth place, she discussed in detail her concepts of sex, the influence of her friends who dilated greatly on the subject; and in the discussion she learned of the normalcy of the desire, and the fact was stressed that sex is not the only source of happiness. She learned that the energy which is usually released in sex activity may be well expended and somewhat released into other non-sexual channels. She was taught that in the interest of an active life, she could minimize and to some extent forget the sex desire, if she had such a goal in mind. Since her husband demanded sex contact, and insisted on withdrawal, there was little that the patient could do other than attempt to avoid becoming aroused. She was to try definitely to avoid the degree of arousal which demanded an orgasm which could not, in the nature of the situation, be satisfied. Lastly, her general tension in regard to the financial difficulties was treated.¹ The patient responded extremely well to these prescriptions and in a short period of time lost her anxiety symptoms.

In the above case, the particular technique of dealing with sex frustrations was applied because the husband as well as the socio-economic system almost precluded any real satisfaction in sex relationships. The physician could not change mates nor the

¹ *Vide* Ch. IX.

financial background and had to do the next best thing to relieve symptoms. The patient learned to adjust on a different level. As society progresses and the ills of our civilized life are removed, many of these forced solutions will become unnecessary; but in dealing with society as it is, the physician must realize that for the patient who is sick and needs treatment, the substitute method of reaction is better than a continuously frustrating direct reaction. This patient, moreover, was fortunate in having sufficient "extrovert" tendencies so that such substitution could be carried out. Where such an adjustability is not possible, the patient tends to remain "a chronic neurotic."

The *type of personality* presented by the patient before the neurosis is often an indication of the relative ease of recovery from a neurosis. It is difficult to make any personality classification that is generally accepted, and only a few of the traits which make for difficulty will be discussed. It must be borne in mind, however, that these traits may be offset by compensating characteristics; and what follows must be qualified by realization of this fact. Persons who have from adolescence been sensitive, shy, intelligent, and energetic, but more inclined than their siblings or companions to be moralistic, and who in later life evidence a drive which brings them some measure of success, who have much pride and are looked upon as solid substantial persons, who tend to be kindhearted and generous without being taken advantage of—in short, persons who seem to be almost the ideal which society has set up—when such persons develop a neurosis, the symptoms are deep, severe, and resistant to therapy. The difficulty in these persons lies in their chronic and constant state of tension. Although this tension may not affect their poise, yet it does affect their attitudes. These persons are inclined to be somewhat impatient,¹ to be restless, and seem to be constantly striving. It is this striving which brings about both the success in worldly matters, and the inner tension which, when exploded, produces a neurosis or a tension depression. This neurosis tends to be characterized by tension symptoms² and frequently manifests itself in spasticity of smooth musculature, in excess activity of the autonomic system, with the result that there often develops paroxysmal tachycardia, essential hypertension, mucous colitis, severe asthmatic attacks, unrelievable headaches,³ etc. These persons present so little in their personality that to the outsider appears wrong, that it is com-

¹ *Vide* p. 214.

² *Vide* p. 30.

³ *Vide* p. 341.

monly said of them "They do not appear neurotic."¹ The fact remains, however, that they have a tense, restless, never content attitude which pervades all their activities. So deeply ingrained is this tendency, and so early does it present itself in life, that it is difficult to insist that its etiology is entirely psychogenic and not constitutional. From a social point of view, these persons accomplish much, and many go through life without a breakdown, presumably because they have enough balance through the operation of relaxing tendencies to release their otherwise constant tension.

The form of "breakdown" in these persons varies with many factors. With the tension type of personality just described, the patient may develop a neurosis, the presenting symptom of which is one of the physiologic disturbances listed above. If the illness does not occur until the "involutional" decades (from thirty-five to fifty-five) it may take the form of a depression with all the elements found in the manic-depressive psychosis,² except that agitation replaces the silent brooding, and the tendency to suicide is greater. Often too, paranoid ideas may insidiously assert themselves; and although the patient is primarily depressed, the picture may appear to be that of schizophrenia. Recovery is delayed because the patient makes constant effort to perform normal tasks,³ their attempts failing because of the depressive state and at the same time creating further tension which aggravates their agitation. In "normal" life, these persons have the energy and "will power" to carry out what they think they ought to do; and they cannot understand their failure to do the same thing in their depressed state, and thus their tension increases. Obsessions⁴ are common, and dermatoses⁵ spring without apparent cause. Therapy in these cases consists in addition to usual psychotherapy, of long drawn out training in how to relax.⁶ They need to learn to avoid keeping their emotions "locked up inside" and to express them without going to the extreme of temper outbursts. They need to learn the philosophy and the practice of tolerance and contentment, without becoming smug. One might say, even more significantly, that *not they, but their autonomic nervous systems, must learn these things.* And by consistent and persistent effort, these tenets may be learned and put into practice.

At the other extreme, there is a group of patients subject to the use of symbolic symptoms,⁷ who are also resistant to therapy. This

¹ *Vide* p. 143.

² *Vide* p. 398.

³ *Vide* p. 268.

⁴ *Vide* p. 41.

⁵ *Vide* p. 316 ff.

⁶ *Vide* p. 248.

⁷ *Vide* p. 33 ff.

group of persons also are often very intelligent, yet they are inclined to permit the slightest caprice or wish to determine their course of action. They have insufficient "will power" to carry out the ordinary, unpleasant duties inherent in the daily routine; yet at the same time they may have a martyr-like ability to withstand pain in crucial heroic moments.¹ Actual sensuousness may be absent, in the sense of sex pleasures, but whatever pleases their vanity, or is flattering to their ego, is not only desired but demanded, in the most petty of fashions. Accordingly, the opinion of others² is far more important to them, than what they themselves think is right. Superficially these persons are pleasant and may be very winning. They are often capable of great dramatic appeal; and often tend to be basically insincere. Many of these persons will deny experiencing sex orgasms while at the same time conducting numerous amorous affairs, primarily because in the amorous situation they obtain more flattery and attention than in any other situation, and not because of actual erotic satisfaction. Lying is far more common than facing the facts and telling the truth. The psychoneurotic disturbances to which they are subject may be in any of the groups, but most frequently are symbolic in nature and have a minimum of tension symptoms. Their deep-seated tendency to give in weakly to whatever pressure or desire is present at the moment and their basic insincerity make therapy exceedingly difficult.

The characteristics summed up in these two extreme types of personality patterns represent a conglomeration not often found in one person. Nevertheless, they represent the extremes, between which there is an infinite number of variations and combinations. The more persons tend to group themselves around either pole, the less easily will they yield to therapy. These traits are found in varying proportions in most normal persons; and it is only when they become intensified or combined with other inadequate reaction patterns that the traits assume a pathologic character. In order to evaluate the personality reactions accurately, the physician must always consider the patient as a total organism, and according to the total situation existing at the time.³ It is impossible to make any hard and fast rule that will apply to all. Psychotherapy must take these variations into consideration, and accordingly *two patients with apparently the same type of complaint may receive opposite forms of therapy*. For example, Mr. X. Y.,

¹ Vide p. 279.

² Vide p. 217.

³ Vide p. 45.

who had "spastic colitis" was urged to work less and be unconcerned about whether he finished his work as it should be done; whereas Mrs. X. Z. with spastic colitis, was told to find work to do, and to keep at her work until it was done, regardless of how her abdomen pained her. In the first case, the man was a tense, over-conscientious person, who worked too hard and who needed to learn how to relax; in the second case the woman sat about the house all day, her work done by a maid, and with no interests to occupy her.

The *coexistence of physical disease* often retards improvement of the neurosis. For this reason, as well as others, it is important that thorough investigation, by physical and laboratory examination, be made of the patient's complaint. It is important to be able not only to tell the patient about how much actual physical justification there is for the pain, but also to be able to judge how far the patient may be pushed psychically in overcoming it.¹

In many instances, a person may ordinarily be able to adjust fairly well in spite of many personality problems; yet at the advent of an illness, may become a whining, complaining, childish invalid, who demands constant attention and is petulant when he does not receive it. This regression² of the subject to childish levels is a rather common form of neuroticism, but it tends to disappear with the disappearance of the illness. If the illness lasts too long or is serious and exhausting, these neurotic complaints may persist long after the disappearance of the physical basis for the complaint. In chorea, for example, aimless movements may continue for years in emotional children. On the other hand, if the personality is undergoing severe emotional upheavals, even a slight illness may be sufficient to precipitate a chronic and disturbing neurosis, which far outlasts the organic disturbance. Moreover, physical illness often comes as a welcome relief to many of these patients for they then have some focal point which is "respectable" and acceptable for expressing their tension. These patients tend to cling to a supposed physical ailment with great tenacity, rather than release it and face the personality problems which are always surrounded by fear and unrest.³ The numerous operations these patients will submit themselves to is a testimony to the intensity of the fears and emotionality surrounding their problems, and to the fact that physical pain is less painful than "personality pain."⁴

¹ *Vide* p. 123.² *Vide* p. 81.³ *Vide* p. 219.⁴ *Vide* p. 277.

Mr. B. B., aged twenty-seven years, worked in the post office in the evenings and went to school during the day time. He wished to become a lawyer but he had much opposition at home from his father who spoke derisively about "snobs" and "college boys," and from his mother who felt that he should contribute to the family's income instead of "wasting his money going to school." His only encouragement came from his younger sister. The instability of his parents communicated itself to him and his feeling of loneliness made for a strong feeling of inadequacy; but he was determined to finish his law course to prove himself capable and adequate. He worked very hard and frequently went with but a few hours sleep.

He developed a cough which he treated himself. One day he coughed up some blood, and on examination was found to have an apical tuberculosis. He was in his last year of law school and the necessity of sanitarium treatment meant that he had to give up all that he had dreamed of. The argument that he could go back to school after his cure did not cheer him, and he was certain that he was doomed. His family were suddenly shocked into the fact that his career was seriously threatened; his father began to talk about his son's becoming a great lawyer and making enough money to "support him in style" but that now "all his sacrifices for his son's education were in vain"; his mother had an awakening of mother love and would pour out all the tales she heard of how dreadful the sickness was, and how many persons died of it, and that even if they seemed to recover, were never really well again. The patient had never before received so much attention from his family as he did at the sanitarium. His lesion gradually cleared up, and after a year he had a clinical and x-ray recovery. He gained 20 pounds and looked very well.

However, on returning to his studies, he complained of great fatigue on the slightest effort. He ate large quantities of food and insisted that his family have special egg and cream dishes; he retired at nine every evening and would become almost panic stricken at the slightest suggestion of a cold. He complained of many aches and pains, and walked very gingerly to avoid "a strain on his lungs." He was three years in finishing the last year of law study and another two in preparing for the bar examination. When he was seen by the psychiatrist he was discouraged over his inability to secure a position in a law office, and he was as full of aches and pains, and as careful about his health as the proverbial "old maid."

Behind these neurotic complaints lay the satisfaction that he obtained from the attention his family gave him because he was "sickly" and a sadistic pleasure from his parents' disappointment that he had not become a great lawyer.

Fatigue.—In a similar manner, fatigue, the result of excessive work, or malnutrition, or some persistent physical difficulty such as a neuritis may undermine the person's resistance to the point where a neurosis may occur, and which may prevent the neurosis, once present, from being resolved. In general it may be stated that physical ailments should be removed first or tackled at least simultaneously with psychotherapy. It makes the task much easier.

Brain Damage.—The amount of brain damage present is an important contributing factor in the persistence of behavior disturbances.¹ In this situation, however, that which ordinarily would be classified as a psychoneurosis, is termed a psychosis, because the person's reactions are associated with signs of intellectual impairment. The alleviation of these behavior disturbances in senile or arteriosclerotic brain changes, is generally brought about by changes in the environmental pressure, rather than by psychotherapy. Many patients cannot get along at home because of family difficulties, which usually have their origin in the patient's vague realization that he has become inadequate and inferior in a situation wherein he once may have been dominant. Since there is actual brain damage, full realization and understanding by the patient is almost impossible, and the irritability which is acute enough at times to give rise to paranoid and violent trends at home, may clear up when the patient is transferred to a quiet and undemanding environment, such as a rest home.²

Psychotherapy in patients who have sustained brain injury after trauma, is, as a rule, difficult. Many of these patients were well adjusted and normal prior to injury; following it, they develop dizziness, particularly on stooping; they have headaches that may be one-sided; there is a general irritability and a moodiness, with crying spells; the memory is often impaired; and there is physical weakness which prevents their going back to work.

X-ray findings in many of these patients do not reveal skull fracture, and neurologic examination is often negative; nevertheless, it is my impression that in most of these instances the "neurosis" that follows is frequently based on definite injury to brain tissue which involves the silent area in the brain and thus does not give rise to focal neurologic signs, but does give rise to personality changes. Autopsy findings for such cases are difficult to get; but those findings which have been obtained are confirmative of this conclusion. There is a general tendency to speak of these patients as having a "compensation neurosis," implying thereby that the patient's illness is the direct result of his desire to obtain compensation. While there are undoubtedly numerous instances of this sort, there are many others in which there is definite brain damage. Such patients may be referred for treatment of their neurosis, yet, it is often impossible to obtain any improvement in their condition by psychotherapy. (Intracerebral air injection as advocated by Penfield, often is of value.) Modification of stress

¹ *Vide* p. 355.

² *Vide* p. 165.

in the environment, and the development of an occupation which the patient can perform without difficulty are of great help. Some of these patients may develop epileptic attacks and others become so difficult to manage that they need to be hospitalized.

Mr. S. M. was a window washer in a large firm. He fell three stories one day and fractured his skull, wrists, and nose, and was unconscious for about an hour. He remained several weeks in the hospital; but when he recovered from his physical bruises and injuries he found that he could not concentrate; forgot easily; was dizzy most of the time, had frontal and right-sided headaches, slept poorly, saw double at times, and at other times "couldn't see for a moment or two"; always felt tired; was unable to read even the daily newspaper; and worst of all, flew easily into rages at the slightest irritation, and on occasion had struck his wife. He was home for six months, and then was given a position as a janitor. He had a cash settlement for his injury and was content therewith. Since that time, however, the symptoms enumerated above had continued despite the fact that all physical examinations were negative. He was diagnosed as a neurotic because there was no physical indication of his disabilities, and because of his emotional outbursts.

Study of his background revealed the ordinary difficulties and the usual mother-in-law problems, but these same problems had existed before the accident, and he not only was unaffected by them but was a happy and hard working person. Psychotherapy was useful only in that it made the patient less intolerant of his inability to work, but it essentially did not change his symptoms. The so-called neurotic symptoms were in all probability based on actual damage to his brain tissue, the damage probably being multiple petechial hemorrhages in the silent areas. In this case there was definite evidence of skull fracture, but in many instances there may not be any skull fracture, and the damage to the brain and personality may be as great or greater.¹

Manic-depressive Depression.—One of the most difficult obstacles to overcome in a psychoneurotic patient is the coexistence of a manic-depressive depression.² Far more persons are subject to mood swings³ than is generally recognized, and many of the psychoneurotic situations have their basis in the brooding and self-accusations which accompany the downward phase of such a swing. In its purest form the depression is characterized by "blueness," inactivity, and retardation of thought processes. In the setting of psychoneurotic phenomena, the patient may express the depression by agitation instead of simple melancholia; he may become restless, though unable to work, instead of purely inactive; and his thoughts may center upon one or two self-condemnatory ideas instead of his being simply unable to concentrate and remember. In other words, the depression is influenced by the

¹ *Vide* p. 164 (Case L. M.).

² *Vide* p. 414.

³ *Vide* p. 285 ff.

patient's personality traits and by the patient's attitude toward his problems.

If then, one is able to remove most of the psychologic difficulties in the sense that they are psychoneurotic in character, there still is left the basic depressive tendency. This tendency is, as we shall see later, physiologic in nature, although its effects express themselves primarily by means of the personality response; *i. e.*, in a general sluggishness of the entire person. Removal of the neurosis is possible, but what usually happens in the psychotherapy of these patients is that the continued existence of the depressive tendency, serves to retain the psychoneurotic reaction patterns. In such situations, either time or metrazol is necessary to clear up the depression in addition to the psychotherapy of the personality problem. Likewise many patients who are suffering from a true manic-depressive reaction, may continue to be problems long after their depression is cleared up, primarily because of the continued existence of the psychoneurosis. In these instances, the completion of the cure is brought about by psychotherapy.

Mrs. C. N., aged thirty-four years, was weak, irritable, nauseated, and constipated. She was more or less a chronic invalid, and complained bitterly about her physical and emotional instability. She was very difficult to get along with, and her children reflected her own insecurity in their behavior problems. When first seen, she had the usual hypochondriacal outlook. She gave a history of being dominated by her parents, who would not let her go about alone until she was nineteen, and even then so arranged the situation, that she married the first man with whom she had a "date." She entered marriage in a period of financial stress, and the marriage was not a happy one. Later she listened enviously when her girl friends would speak of the men they went with and the good times they had. She felt inadequate and inferior and longed to have had the experience of others. She had never been free; for even after her marriage, her parents still dominated her, coming to her home, criticizing her husband, and in general, interfering in the domestic life. In this setting her hypochondriacal symptoms developed. She felt too weak to get out of bed, she was nauseated so that she could not eat, she had constant headaches, her children irritated her easily, she was depressed, she slept poorly, etc.

Psychotherapy was instituted, and the patient soon lost her nausea, became stronger, was able to do some house work, learned not to be upset by her parents, developed emotional independence of them and persuaded them to see her only once a week, and lost most of her headaches. As these symptoms disappeared, there was uncovered a definite picture of a manic-depressive depression. The patient felt blue, could not concentrate, was more depressed in the morning than in the afternoon (a depressive phenomenon in contrast to the neurotic tiredness and melancholia which is greater as the day wears on), was constipated, slept poorly, and felt no interest in activities which she had formerly enjoyed. These later symptoms were not

those of the neurosis but of a depression and had been present during the entire illness but had been modified by her psychogenic difficulties. These symptoms were the result of an underlying physiologic depression, which came clearly to light on the removal of the defective reaction patterns. For this depression, metrazol shock therapy was instituted, and after eight treatments, the patient recovered completely. If the metrazol therapy had been given before the psychotherapy, the reverse situation would have occurred: the depression which was physiological in nature would have cleared up, but it would have been difficult to determine when to cease the metrazol therapy because the neurotic symptoms would have continued and confused the picture.

In all these patients, one must remember that in addition to physical ailments there may be personality difficulties, and both need to be treated. The occurrence of manic-depressive depressions in their minor form often goes unrecognized. When they do occur, they may aggravate any existing difficulty and retard or prevent what would otherwise be a cure. It is interesting to observe how clearly a manic-depressive symptom complex may come to the fore after the psychoneurotic symptoms are removed. Moreover in such a combination of conditions, the physiologic depression is undoubtedly of etiologic importance in precipitating the neurotic symptoms, and in the prognosis of their disappearance.

Duration of Neurosis.—The duration of the neurosis prior to treatment is also of prognostic significance. Usually (again with many exceptions) the shorter the duration of the neurosis, the easier it is to cure it; and the reverse is true with neurotic illnesses of long duration. One reason for this fact is the tendency toward habit formation, for the symptom once being established tends to perpetuate itself.¹ This tendency is an important element in such conditions as hysterical paralysis, in spastic colitis, in stammering, in paroxysmal tachycardia, and particularly in any ailment involving the use of smooth or striated muscle. Muscle tissue is very susceptible to conditioning, and to repetition of similar actions. However, even *emotional responses may take on the characteristic of being habitual*, and so require the breaking down of a habit in addition to the removal of the basic emotional strain.

Even this statement has many exceptions. For example, some patients may develop a neurosis on the basis of intense environmental stress (this in itself has a better prognosis than do the cases with little environmental stress²) and as time passes, the stress may disappear, so that by the time the patient comes for treatment, it may be easier to remove the neurosis than it would have been if

¹ Vide p. 48.

² Vide p. 269.

the patient had come while the stress was still quite strong. Again, some neuroses may be based on internal drives resulting, for example, in sex dissatisfaction, or ambitional unrest; and these too, may tend to diminish during the later decades of life.¹ There are variations even to these variations, for in some persons the sex drive may even increase after menopause.² Again, the passage of time may be helpful, where there has been a great hurt, or where the pride has been wounded severely, and the healing element of time is important.

Occasionally neurotic symptoms are of value to a patient. In certain situations a person may, by having symptoms, be able to work on the sympathies of others and obtain concessions and attentions which he would otherwise never achieve. The case of the man with the paralyzed legs³ is in point. Often such symptoms are symbolic in nature. As a rule, the symptoms are not the result of conscious malingering, but occur either in the setting of great stress, or against the background of an immature personality. Not infrequently do they occur in aged persons after the death of a mate,⁴ or with the beginning of senile brain changes. Mothers may use this technique to blame their children for the "awful way in which they treat their parents who 'sacrificed their all' to give them a happy life"; and on occasion adolescents, or unmarried women past thirty-five will make the most of their symptoms in order to dominate their household.⁵ Such symptoms and such situations are so related that psychotherapy must usually be preceded by changing the environmental stress in order to obtain satisfactory results. Strictness in these instances fails more often than it is successful for these patients if treated with severity tend to adopt a martyr-like attitude, and will suffer much pain and torment rather than admit they are wrong. Adequate therapy should remove the cause for the patient's actions as well as very gently persuade the patient to deal frankly and directly with his difficulties.

THE HOMEOSTATIC CURVE OF IMPROVEMENT

When a patient begins to recover from his psychoneurotic illness, the improvement rarely follows a steady path in which every day his condition is better than it was the day before. Improvement, diagrammatically speaking, is not a perpendicular rising from the

¹ *Vide* p. 103.

² *Vide* p. 167 (Case H. I.).

³ *Vide* p. 37 (Case D. W.).

⁴ *Vide* p. 259 (Case H. H.).

⁵ *Vide* p. 39 (Case L.).

nadir of illness, but an irregularly curved line moving steadily though not smoothly away from the depths of illness and up toward the base line of normal health. Progress is made from the "lows" of the illness very much as the terrain proceeds from the plains through rising foothills with intervening valleys, and comes finally to the high point of the mountains.

It is important alike for physician and patient to recognize that this type of recovery is to be expected, for then the inevitable "set backs"¹ can be objectively evaluated and their attendant discouragement discounted. Frequently, a patient responding well, benefiting greatly from the first psychotherapeutic session is sure that he is on the high road to immediate recovery, only to return two or three visits later, depressed and discouraged because he has not maintained his improvement, and anxious to try some new remedy. If by positive clinical and laboratory findings the physician has ascertained the absence of physical disease, and if he has uncovered precipitating emotional factors, then recognizing the patient's temporary remission as being an implicit part of the "curve of improvement" he will not be tempted to change his psychotherapeutic procedure; and his confidence will, in turn, communicate itself to the patient. Here as elsewhere, "to be forewarned is to be forearmed"; and the patient having been told what to expect, will be less discouraged by the temporary return or aggravation of his symptoms than he otherwise would be. These remissions in the curve of improvement are part of a natural tendency toward swings in all psychobiologic activity.

NORMAL SWINGS

When one uses the word *normal*,² he must bear in mind the fact that it is a relative and not an absolute term, a descriptive and not a scientifically accurate expression. The range of normalcy is great, and within its confines is to be found an infinite variety of types and combinations of types. If one were to draw a straight horizontal line to represent "normal" psychobiologic activity, and then attempt to measure by it the activity of any given "normal" person, two interesting facts would at once become apparent: (1) the two lines would be only roughly parallel; (2) the line for the individual case would not be straight but wavy. In other words, no person exactly corresponds with an arbitrarily established norm; nor does his own base line of activity and mood proceed in a straight line, at a constant level.

¹ Vide p. 137.

² Vide p. 262 ff.

In all persons there are definite fluctuations in at least three spheres: (1) mood, (2) activity, and (3) flow of speech. These three personality characteristics appear in various proportions and combinations in each person but commonly increase or decrease as a unit. Thus when a person is "happy", he also as a rule, is more active and speaks more freely; and conversely, when a person becomes comparatively inactive (compared with his usual self) he also tends to be less gay and more silent. Though it may be generally stated that these three elements (mood, activity, speech) move in the same direction at the same time, the physician in evaluating any set of personality changes must be careful to remember the individual differences which always exist. For example, in some persons the speech output is habitually great as compared to their activity, so that when the activity decreases and there is corresponding decrease in the flow of speech, they may still be loquacious as compared with others, though taciturn as compared with their former state.

For most persons there is a definite and more or less consistently characteristic baseline of mood, speech, and activity. This baseline may be set higher; *i. e.*, higher than the arbitrarily established norm, in some than in others; and among normal persons there are some who are generally energetic, and some who are usually passive. The difference in energy output is markedly influenced by many factors: the state of physical well being, the requirements of work and social activity, meteorologic changes, psychologic factors, internal diurnal fluctuations, etc. Nevertheless, each person tends to have a definite and characteristic minimum expenditure of "energy,"¹ and the daily averages are the same over a period of years.



FIG. 1.—Every person has varying levels of at least three functions: first, mood; second, frequency of ideas and, third, activity, all roughly parallel and all fluctuating within a given range peculiar to the person.

Fluctuations occur in this baseline as the result of internal homeostatic physiologic mechanisms as well as of external forces (see Fig. 1). These fluctuations vary with the person, apparently with some correlation between these fluctuations and the type of constitution. The person with the pyknic habitus is inclined to

¹ *Vide p. 244.*

have long waves of elevations or of depressions in activity, each "wave" lasting for many weeks or months; the asthenic person tends to have a relatively consistent baseline with sudden outbursts of energy and activity during which he may accomplish much but which are of short duration. The pyknic¹ person tends to be consistent and persistent; the asthenic, sporadic, with brilliant but brief flashes. Between these two extremes are countless variations, and the "normal" person does not lend himself easily to classification because of the inseparable and complex admixtures of these types.

"Ups and downs" in mood are every-day experiences; and their causes are legion. There are diurnal fluctuations in moods just as there are similar variations in body temperatures, many persons consistently feeling better in the morning than in the evening, or vice versa. Acutely disturbing or exceedingly pleasing events may sharply elevate or depress the baseline of mood; and obviously psychologic factors are pervasive in their influence. Yet even when there is a constant psychologic stress or when there is external stress of a compelling nature, fluctuations which are primarily physiologic in nature occur in such a way as to provide periods of relatively less depression. To speak more succinctly, one may say that no person whether he be "normal," "manic," or "depressive" pursues the even tenor of his way, variations (swings, curves) apparently being an inherent physiologic basis in personality development. Once more attention is called to the fact that the differences between the psychobiologic attitudes of normal (average) persons and psychotic or psychoneurotic patients are not differences in kind but of degree.

PATHOLOGIC SWINGS

The fluctuations mentioned above occur within a relatively small range in the average person. Rarely do normal persons swing so "high" that they become euphoric and ecstatic; nor on the other hand, seldom do they swing so "low" as to develop persistent suicidal thoughts. These extreme swings often do occur, however, in psychopathic personalities² and in manic-depressive psychoses.³ Between the pole of average variations in mood and the pole of pathologic swings fall the many persons who in common parlance are said to be "subject to moods." Primarily, such swings, varying in height and duration, are *physiologically* determined even though

¹ *Vide* pp. 398; 421.

² *Vide* p. 462 ff.

³ *Vide* p. 398 ff.

psychologically precipitated and so are resistant to modification, though the average person by properly directed efforts may succeed in controlling their manifestations.

It is important to emphasize the relative independence of psychologic factors and "swings." When a person is "high" as the result of a spontaneous swing in his baseline, stresses and irritating news have comparatively little power to depress him; he is "able to take everything in his stride"; and is relatively unimpressed and unaffected by any other than the most acutely disturbing events. Conversely, when a person is "low," he will become melancholic over some minor difficulty which ordinarily he would disregard; and even unusually good fortune will be so discounted that only momentarily does it raise the level of depression.

The significant implication of the foregoing discussion is that the total response of a person depends not only on the strength of the depressing (or stimulating) factor but also upon the position with reference to his baseline. In figure 2, for example, a depressing factor at B will be much more distressing than the same factor at A. In manic-depressive states such relationships are obvious; in the normal and psychoneurotic states these reactions, though less obvious, are just as true.

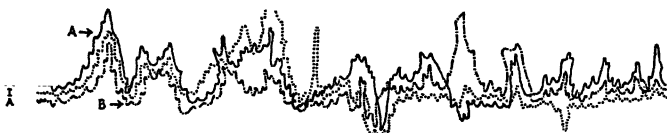


FIG. 2.—In unstable persons, these levels fluctuate widely, from exaltation to depression, from scintillating wit to mental dullness, from great activity to sluggishness. These fluctuations vary in intensity, as a rule, with *physiologic* instability though psychologic factors play important roles. Psychologic irritations may be minimized or intensified depending on the time they occur. Thus if irritating circumstances were to occur at A, they might be regarded lightly; whereas if they occurred at B when the person was already depressed they might drive the person to suicide.

Disease processes, emotional or physical, can so disturb the organism that these swings in mood are more apparent and more marked than at a time when the person is in an excellent state of health, and his homeostatic mechanism¹ is so efficient that fluctuations are checked quickly enough to keep the subject on a relatively even course. Disease adds an extra load to the organism;² and should there exist a basic instability,³ the extra stress of the illness

¹ Vide p. 217.

² Vide p. 278.

³ Vide p. 342.

may be sufficient to uncover swings which ordinarily would be well compensated and therefore obscured.

THE CURVE OF IMPROVEMENT

A graph representing the improvement which takes place after psychotherapy has been instituted is like the graphs of "normal" persons in that the progress is not straight but made up of a series of curves. The early stages of treatment are often characterized by periods of amelioration of symptoms followed by periods of exacerbation. A graph of improvement, however, will be different from a graph of pathologic swings in two important respects: (1) the line will not be horizontal, but inclined away from the level of illness and toward that of normal health, and (2) as it approaches the upper level the line will tend to straighten out; *i. e.*, the "ups and downs" will more closely approximate in appearance those of normal health. Diagrammatically, this progress—this curve of improvement—may be represented as in figure 3.

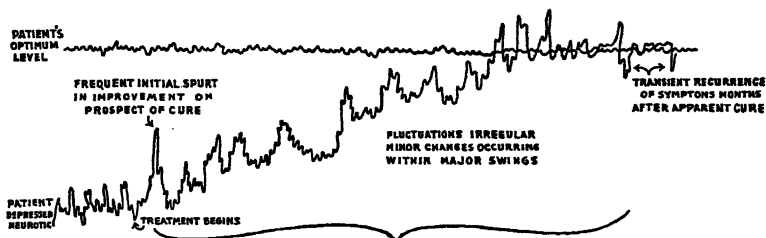


FIG. 3.—Recovery time varies from a few weeks to years according to the patient and his illness.

The specific neurotic symptoms will tend to fluctuate in their intensity just as the mood fluctuates. One can more easily understand this variation if he remembers that the specific neurotic complaint is only a focal expression of a general emotional difficulty.¹ Moreover, during psychotherapy itself, there will be a shifting of the patient's emphasis to the etiologic factor; and the general improvement will therefore be accompanied by a lessening of the focal complaint.

As the therapy continues and the patient continues to improve, exacerbations and remissions of symptoms continue also. When a patient has a remission in his upward curve of improvement, he almost invariably will contrast his present mood with that which

¹ *Vide* p. 304 (Case N. T.).

has immediately preceded and as a consequence may "feel" just as depressed as he did early in the treatment. However, in actuality, at his new level, he has far fewer neurotic symptoms and is far better able to carry out his desires than he was formerly. In other words, the emotional evaluation of his status is essentially dependent upon the immediately preceding "feeling"; but an intellectual understanding¹ of his changes as presented and interpreted by the physician may ameliorate his mood, and enable him to appreciate his continued progress. Although a down swing is almost always accompanied by general hopelessness, tiredness, and irritability, symptoms which seem to have no end, and a future which appears black, if the patient forces himself to observe these symptoms objectively and for proof gazes at the exacerbations and remissions which he has already passed through, he can then not only "know" but also in part "feel" that he is improving. The duration of these swings varies greatly from patient to patient, but in the improving psychoneurotic patient the swing frequently lasts from several days to several weeks. There is a tendency, however, for the depressive swings to be of longer duration early in the illness, with the remission of symptoms at first lasting only a few hours, then increasing to a day, and finally lasting longer than does the depressive phase. Even when the patient seems to have recovered, he may months later have mild recurrent attacks. Some manic-depressive patients have had attacks lasting several days each, occurring first a month after the patient was apparently well; then two months later; then six months; and so on until the time when they ceased altogether.

The steepness of the recovery curve varies with each patient. Commonly, if the illness began suddenly, the time required for recovery is relatively short;² whereas if the illness had a prodromal period of many months, the recovery curve is also long delayed.³ The recovery rate also is dependent upon many factors: environmental hindrances,⁴ the degree of rapport⁵ between patient and physician, the amount of cooperation from the patient,⁶ and the type of neurosis, and all the other factors mentioned under prognosis.

Within these fluctuations from day to day and week to week, there exist almost hourly fluctuations. Thus when patients are asked to record their emotional status for each day, using as a

¹ *Vide* p. 219.

² *Vide* p. 139 (Case B. M.).

³ *Vide* p. 134.

⁴ *Vide* p. 139 (Case F. B.).

⁵ *Vide* p. 324 (Case C. D.).

⁶ *Vide* p. 227.

measure a numerical scale (where 1 is marked depression, 3 is "fair," and 5, a feeling of well being), they will record several values, indicating marked fluctuations within the day. One patient, for example, remarked that she "felt differently every fifteen minutes."

If the therapy is discontinued before a cure is established, and if the patient is not able to continue the improvement himself, the fluctuations tend to continue at a slightly lower level than they were at the end of the treatment. In some instances, the curve having reached an almost "normal" level, reverses itself, and pursues a downward course until the patient is again at his "illness" level. If he maintains the highest point that he reaches during therapy and does not advance, he learns to adjust on an inferior level so far as his neurosis is concerned.

CHAPTER XIV

PSYCHOSOMATIC DISEASES AND THEIR TREATMENT

MANY diseases which the medical practitioner encounters are in the borderland between "pure organic medicine" and "pure" psychiatry. These illnesses include the group termed psychosomatic diseases, and the following are the most common: paroxysmal tachycardia, essential hypertension, respiratory tics, asthma, peptic ulcer, "gastrica nervosa," spastic colitis, mucous colitis, urinary frequency, impotence, neurodermatoses, ringing in the ears, menstrual irregularities, insomnia, and headaches.

Many of these illnesses may result from almost purely physical causes; but in the large majority of cases, two other phenomena play an important role: constitution and emotional "tension."

The role of constitution is poorly understood at the present time, but the frequency with which the same type of illness occurs in one family is a strong suggestive indication of its importance. Moreover, since it is so difficult to treat the constitution, there is a strong tendency to disregard it, despite its importance for understanding the illness.

The role of the physical factor is very great. Thus in asthma, the sensitizing agent is deemed the determinant of the illness; but on closer inspection, one finds that there are often a constitutional predisposition and an emotional accompaniment. Peptic ulcer is said to result from an improper diet, but the clinician with experience knows how important the role of emotion is. Ringing in the ears is a most disturbing complaint associated with middle ear pathology, but it often occurs without any clinical or visible evidence of infection or other "organic" disturbance. Menstrual irregularities, such as menstrual delay in the non-pregnant woman who fears pregnancy, may yield to prostigmine despite the obvious psychologic etiology. Physical factors are of the utmost importance, but always in relation to the other two.

Similarly, the influence of emotion is the reason for the segregation of this group of illnesses. Emotion produces its symptoms via the increased activity of (tension in) the hypothalamus which in turn influences the autonomic nervous system directly, and the endocrine system via the supraoptic hypophyseal stalk. The whole thesis of this book has been the relation between sociologic

and psychologic states and the biology of the person. In civilized man, of today, this relationship is very obvious.

Consequently, in evaluating any of the psychosomatic diseases either as to etiology or as to treatment, it is necessary to keep in mind three factors: (1) the amount of constitutional predisposition, (2) the intensity of the physical, organic disease, and (3) the intensity and chronicity of the emotional tension. Thus there may be some cases of asthma where the familial predisposition is so bad that the child develops sensitivity at an early age and to a great variety of antigens; the other two factors play a minor role. There are other instances of asthma where the constitutional heritage seems normal, but the tremendous sensitivity to one major antigen is so great that the treatment for that one substance results in an immediate and complete cure. And there are other cases with "good" constitutional background, with but minor sensitivity to antigens, but with outbreaks of asthma only in an emotional setting. The following discussion will describe in more detail some of these cases in relation to psychoneurotic tension states.

MECHANISM OF SELECTION OF FOCUS OF SYMPTOM

It is not always clear, why, in the psychosomatic diseases, two persons with apparently identical emotional stresses; *e. g.*, financial difficulty, should have symptoms in different parts of the body. Of several patients with apparently identical stress, one may have headaches;¹ another, cardiac pains;² a third, spastic colitis;³ a fourth, neurodermatoses,⁴ etc. Several possible explanations arise: (1) there may be *constitutional differences*, such as the family in whom peptic ulcer developed through several generations although the ulcer symptoms often were precipitated by emotional stress;⁵ (2) the organ involved may have been subject to *some initial physical disturbance* upon which the emotional distress becomes centered and fixed, as for example the "psychogenic vomiting" which may come to be the habitual response to the eating of any food several years following the eating of a particular nauseating food; (3) *the physical dysfunction may be symbolic of the patient's emotional problem*, as was the blushing of the woman whose husband was unfaithful;⁶ or the throat spasm in the interne who feared insanity (rabies

¹ *Vide* p. 169 (Case F. S.).

² *Vide* p. 310 (Case S. B.).

³ *Vide* p. 306 (Case S. T.).

⁴ *Vide* p. 297 (Case H. F.).

⁵ *Vide* p. 319 (Case S. L.).

⁶ *Vide* p. 69 (Case X. F.).

in this case) over his "unsolvable" problems;¹ (4) the stresses may be, and usually are, only "apparently" but not actually identical.

It is commonly found that the patient misleads the physician by focusing on one complaint;² whereas a careful history reveals that although the one complaint may be the dominant one, there are many other complaints. Patients referred for pseudo angina pectoris, for aphonia, for mucous colitis, are found to have symptoms in other parts of the body. The diagnosis of neurosis is aided by the ubiquity of the patient's emotional response.

Psychoneurotic symptoms are not "imagined." The pain which such a patient experiences is as real to the patient and as difficult to bear as "organic" pain. In addition, the pain has the added qualities of fear and anxiety which make it still worse.

Such fear and anxiety, stemming as they do from the same source as the symptom itself; *i. e.*, basic emotional maladjustment, are even more intense than are the fear and anxiety concerning an organic difficulty.

Moreover, it is a mistake to presume that there is no change in the tissue complained of. Generally there are alterations in the tone of the autonomic nervous system³ which produce "real" disturbances; and these are perceived by the patient as being very intense. There may be tachycardia, extrasystoles, definite and painful spasms of the intestine, increased secretion of hydrochloric acid, etc. These physiologic reactions may be psychogenic in origin, but they are none the less real; and may be the basis of further anxiety. In summary one may say: The *determining mechanism* of so-called functional disorders lies in the constitutional predisposition, in the shaping influences of the environment, and in the precipitating factors of stress. The *mediating mechanism* is the physiologic tension, with the resulting increased activity of the vegetative nervous and endocrine systems, its associated tenseness of smooth and striated muscle, and the psychologic accompaniment of apprehension and unrest. Such tension is practically always general, although its most annoying manifestation and the chief complaint may be focal. The *determination of the site* of the main manifestation of this general tension may be by psychologic stimuli, physical predisposition, or by more fundamental inheritable or constitutional predispositions. It is difficult to separate the etiologic factors. In the case of the interne⁴ the spasm of the throat was "caused" by a fear of rabies. Mr. G. H.⁵ developed tics

¹ Vide p. 57 (Case N. O.).

² Vide p. 323 (Case W. H.).

³ Vide p. 85 (footnote).

⁴ Vide p. 57 (Case N. O.).

⁵ Vide p. 300.

of grunting after an irritated sore throat. Mrs. X. F.¹ blushed constantly after initially being concerned over an obscenity and so on. In these instances all the forces necessary to produce tension were present, and the patients seized upon any unrelated physical reaction or physical disturbance of the moment and used it as the focal point of release from then on. This general truth is the primary reason for paying relatively little attention in most cases to the symptom although it appears to be the most disturbing element; this is the reason why dealing with emotional tension and relieving pent-up energies is automatically followed by disappearance of the symptom. Accordingly, the physician though he may at times deem it advisable to have recourse to palliative therapy,² will know that permanent cure will come about only if the cause of the symptom is removed. He will realize that the patient is unconsciously telling a falsehood when he insists that if only his symptom were removed, his worry would disappear. The principle of treatment must therefore be a thorough analysis of the socio-psychobiologic factors which have brought about the symptoms,³ followed by a socio-psychobiologic resynthesis⁴ of the personality so that unhygienic traits are removed and mental hygiene attitudes substituted.

The number of psychosomatic symptoms is legion.⁵ Those discussed below are only a few which illustrate some of the mechanisms.

CARDIOVASCULAR SYSTEM⁶

Pain Over the Heart.—This is a frequent complaint. It is usually associated with palpitation, dermatographia, moist palms, and a fear of heart failure or impending death. The pain tends to

¹ *Vide* p. 69 (Case X. F.).

² *Vide* p. 236.

³ *Vide* p. 123.

⁴ *Vide* p. 125.

⁵ In an effort to emphasize the interrelationship between the psychiatric approach and the medical approach, one may divide all medical ailments into three groups: (1) those illnesses which result primarily from external physical sources such as the toxic-infectious traumatic diseases, and which are appropriately treated primarily by physico-chemical agents; (2) those diseases which result primarily from internal sources such as the degenerative diseases of arteriosclerosis, senile dementia, some forms of nephritis, and from neoplastic changes; and (3) psychosomatic diseases which result primarily from the pressure of emotional factors upon constitutional predisposition, and which are best treated by the combination of physical and psychotherapy. The psychosomatic diseases include such conditions as essential hypertension, paroxysmal tachycardia, hyperthyroidism, certain forms of arthritis, peptic ulcer, spastic colitis, many forms of headaches, diabetes, and so forth. In many of these conditions, the most important factor may be the constitutional predisposition (*vide* the formula $S \times E \times Inh.$ C., Chap. IX, page 185), and in many others the precipitating forces may be in the nature of diet, of climate, of associated infection, etc.

⁶ *Vide* p. 88 ff.

be constant and aching in nature. It is present in rest as well as in activity; but may disappear when the person's attention is distracted. Auscultation, and even electrocardiographic studies reveal no pathology. The cardiac rate varies, but is usually rapid. Extrasystoles may occur.

Mr. A. S., aged forty-two years, was referred because of an intractable pain over the heart from which he had suffered for two years. Studies in the clinic gave negative results. There was some local tenderness, but no signs of disease could be found. The patient was worried about his complaint, and feared it was heart trouble which would cause his death. The skin over the tender area had even been infiltrated with novocain, but no relief was obtained. The patient was a house painter of average intelligence. He worked during the day and at home in the evening, helped his wife with household tasks, and after reading the paper went to bed. He had no "bad habits," was very conscientious, serious minded, and devoted to his family, made up of his wife and two children. Some five years ago, his two year old daughter had a broken leg which was followed by osteomyelitis. Treatment for this bone disease had drained his resources. Two years ago, his five year old son had had scarlet fever which "left bad kidneys," and the patient worried greatly because he had heard some neighbor remark that bad kidneys cause high blood pressure and strokes. Shortly after his son's illness, his wife became emotional and disturbed and the patient felt the burden of the entire family on his shoulders. He felt helpless and hopeless. One morning his wife complained of pain in her chest, and the patient immediately felt pain (identification)¹ over his chest. The fear then entered that he might have heart trouble. The pain persisted. He became so weighed down by his troubles that he had thought of suicide and death; his thoughts were centered on physical ailments; and he literally "took things too much to heart."

In essence then, this man's cardiac pain was the result of tension and concern over his problems. To cure the pain, he had to learn to be less tense and to avoid thinking of his difficulties except in those aspects wherein he could actually and practically help. He was told that his heart was normal (he had been told that repeatedly before without avail), but it was further explained² that his pain could come from some muscle tension in his chest. This tension was the result of his general emotional tension. He was overly concerned with his problems and needed to subordinate them. To accomplish this purpose he was first to make the conscious attempt to put his worries out of his thoughts as soon as they entered, and secondly he was to find outlets of a social and recreational nature. Detailed methods for doing these two things were discussed with him. He was then taught, by the methods previously described,

¹ *Vide* p. 77.

² *Vide* pp. 181; 308.

how to relax.¹ In addition, barbital $2\frac{1}{2}$ grains three times a day was given and its tension releasing action explained to him. After two discussions the pain disappeared and remained away for four weeks, after which time it recurred only to disappear with further discussions about his emotional problems pointing out wherein he was tense and how he could relieve the tension.

Palpitation.—Palpitation is one of the most common of cardiac symptoms. It is usually accompanied by tachycardia, though often the heart rate is normal, the pathology lying in an abnormal *awareness* of the heart action. Physical functions do not as a rule enter consciousness, and we are not aware of our teeth, or our intestines, or any other parts of our body unless they are diseased or painful, or unless our awareness of them increases. *Extrasystoles* or "heart jumps" are a frequent complaint; although pathology is rarely found. These symptoms are usually the result of tension.

Mr. H. F., aged forty-nine years, complained of palpitation and marked skipping of beats. He was very worried about his condition and thought of all sorts of dire possibilities. Examination disclosed definite extrasystoles. However, auscultation revealed no other pathology; response to exercise was normal; and the electrocardiograph showed no pathology. Mr. H. F. was a successful business man occupying a position of importance in a national concern. He had had only high school training but was ambitious and read widely. He was very conscientious and took his business problems home with him. His superior in the office had grudgingly advanced him but disliked the patient and frequently spoke in his presence about the need for better trained college men. The patient felt that insinuations were directed against him and brooded constantly over the possibility of losing his position. Further in the background and revealed only accidentally through conversation with his wife, was the fear that he might become insane as his mother had. His mother had died in an institution.

Essentially then this man's symptoms were based on: (1) his insecurity in his position; (2) his general tendency to worry and concern even over business details; and (3) a lifelong fear of insanity. Treatment was directed towards having him adopt a philosophic attitude towards his position, teaching him how to avoid worry² and reassuring him on the influence of heredity and the influence of environment and disease in the production of insanity. In addition he was given instruction on how to learn to relax by means of recreation and socialization.³ He responded quickly to therapy.

¹ *Vide* p. 248.

² *Vide* p. 196 *ff.*

³ *Vide* p. 253.

Paroxysmal Tachycardia.—Paroxysmal tachycardia¹ is poorly understood as to pathology. When it does occur it usually is in a setting of tension. It is generally found in “vagotonic” persons who are sensitive, proud, and capable of working hard. These persons tend to “worry inwardly”; *i. e.*, though they appear to shake off any trouble and worry, in reality they “tremble inside” and react to the worry by increased response of the vegetative system. These persons are difficult to treat for they are overtrained and have overdeveloped their conscious control over the expression of emotions without removing the tension associated with those emotions in contradistinction to the more emotional hypochondriac in whom the emotional tension overflows into conscious feeling, thinking, and acting. The attacks frequently occur hours or even days after an emotional incident.

Miss N. L. was hanging curtains when her heart began to pound rapidly and she felt faint. The physician when called could not count the pulse because of its rapidity. She continued to have attacks which lasted from one-half hour to one-half day. They seemed to come on without any provocation, while she was sitting quietly or while she was working. Examination showed no pathology.

On closer questioning, this patient revealed that the night before the first attack she had gone to a dance, and her escort had neglected her all evening in favor of another young woman. She pretended to pay no attention and seemingly was unconcerned about the matter. However, she lay awake a long time thinking of it and was depressed on arising. The attack came on shortly after lunch. (Many of these *cardiac symptoms seem to occur after a large meal*, possibly because of the extra load a dilated stomach makes on the heart, and because of reflex action.) This simple disappointment occurred in the setting of a rather intense person. She was twenty-five and wished to be married; such a disappointment was therefore all the greater. She was closely bound to her mother and did not have many friends. She was an active person who liked to work and could not bear idleness, and she had been two years without employment. She had had a bleeding peptic ulcer, and a mild form of Raynaud's disease. Though she was somewhat benefited by reassurance and suggestions aimed at socialization, recreation and diminishing of general tension, her tachycardia continued to occur spasmodically until she procured a position and was married. She had no further attacks in the five years during which her case was followed, an important therapeutic factor probably being her marriage.

Essential Hypertension.²—The response of blood pressure to emotional states is well known. When a patient enters the office for the first time, the blood pressure is often found to be from 10 to 50 points higher than it is after a half hour of reassuring con-

¹ *Vide* p. 89.

² *Vide* p. 90.

versation. These patients are apprehensive, and fearful of the examination and what it may reveal. Such rises in pressure are usually temporary. In some patients, however, there is a chronic state of anxiety and fearfulness, associated with a chronic state of elevated blood pressure. The condition called essential hypertension tends to occur in tense persons, in whom there is less of a definite precipitating emotional difficulty, and more of a subtle, pride wounding, or insecurity producing situation. In these patients the overly tense attitude which for years they have had toward their personal problems is the basic factor. This fact is important to remember, for the casual history often fails to reveal any emotional difficulty. The treatment for these patients, in addition to pertinent medical procedures, is prolonged psychotherapy in the form of retraining their attitudes toward their personal problems.

Mr. K. N., aged fifty-three years, complained of dizziness, of headache and of "high blood pressure." Examination revealed no pertinent pathology in the cardiovascular system or elsewhere except for a blood pressure reading of 176/104. He stated that he was without any special irritations, "except of course those occurring in business," which was running smoothly. Wife and children were congenial and he could list no emotional difficulties. His son, however, gave some significant information. The patient was in the laundry business with several partners. Financially he was successful; but there was intense rivalry among the various partners as to efficiency, and there was constant fault finding. It had been to their financial advantage to remain together; but "there was constant grief and aggravation." The patient was a conscientious person who "carried his business troubles to bed," and in the last few years he had become exceedingly irritable and had violent temper outbursts. Moreover, he had no outlets and no recreation other than his work. On Sundays and holidays he was restless, not knowing how to relax or what to do. His symptoms were thus the result of his way of living, and of his continuous irritation.

The therapy in this case was relatively simple. Since his financial status was secure, he was persuaded to sell his share of the business and seek methods of relaxation. He was not allowed to be idle, however; for *sudden idleness in a person who has been active all his life is often followed by such consequences as depression, malaise, restlessness, and unhappiness*. He was persuaded to enter his son's organization on a part time basis, spending his leisure time in gardening, bowling, and golf. Three months later, his blood pressure was down to 140/90, and his entire outlook on life had so changed that he stated, "For the first time in my life, I'm really enjoying myself."

Most patients with such emotional hypertenison do not yield so readily to therapy. In patients who have had high blood pressures for long periods of time, some permanent change seems to have occurred which prevents much lowering. Moreover, the arteriole spasm which presumably is at the basis of the emotional hypertension, has taken much time to develop, and is in itself a difficult process to reverse. Psychotherapy in such patients accomplishes most by removing further emotional trauma, and by making it possible for the patient to adjust himself to his physical condition with a minimum of difficulty.

The author has treated with convulsive shock therapy several patients who were suffering from a depression of the manic-depressive variety,¹ and who were observed to have hypertension before the treatment began. Six or seven treatments resulted in a lowering of the blood pressure to within normal limits and a subjective feeling of relaxation. The cardiovascular system was normal at the end of the treatment. It is possible that as these patients lose their tension by means of this chemotherapy, the vascular tension also disappears.

Respiratory Tract—Chest.²—Sighing and inability to take a deep breath are very common complaints among psychoneurotic persons. Many such patients are observed to breathe relatively quickly and shallowly, with interspersions of deep sighs. It is possible that the frequent short respirations are insufficient to remove all the carbon dioxide from the blood, and that when this accumulates, a deep respiration occurs to aid in its removal. The cause of the frequent short respirations is excitement, anger, fear, or other emotional tension. The irritability of the respiratory centers may be so increased in the psychoneurotic patient that reflex irritability may bring about premature discharges and thus prevent deep breaths being readily taken and so give rise to the feeling of heaviness on the chest and difficulty in taking a deep breath. Whatever the precise explanation, however, the treatment of this state is directed not toward the respiratory tract but toward the emotional tone behind it.

Tics.³—Tics of grunting, snorting, and coughing have the same general genesis as do all tics, and are classified as symbolic symptoms. Tics are often of long standing, appearing early in life, and disappearing for various periods only to reappear again. Since tics require the movement of voluntary muscle, and since voluntary muscle (as well as smooth muscle) actions can easily become

¹ *Vide* p. 398 ff.

² *Vide* p. 91 ff.

³ *Vide* p. 30.

habitual, the treatment of tics has two components: (1) the usual one of determining and removing the underlying emotional difficulty, and (2) the breaking of the habit tendency. This latter is greatly aided by hypnosis,¹ in conjunction with psychotherapy.

Mr. G. H., aged twenty-seven years, made grunting noises and shrugged his shoulders. This condition had been present for fifteen years, appearing and disappearing at irregular intervals. He was married and had a small son. His domestic life was excellent and he was able to live on his income without undue stress. He had had this tic for the last five years, but it had increased in intensity so that his wife and friends could not tolerate him for any length of time in their presence. At work, he hardly ever manifested his peculiarity, but when he returned home all the restraint he was capable of exercising while at work disappeared and his grunting and neck twisting became pronounced. His background was a very disturbed one: his father was a drunkard who had made the boy feel miserable. There was a constant feeling of inadequacy, irritation, and unhappiness, so that the patient had run away from home at the age of thirteen. A year before he left home, he had had a sore throat, during which time there were a great number of family arguments. The clearing of his throat had persisted thereafter, and eventually became habitual. The memory of his unhappy childhood was always with him, and the grunting noises became a conditioned reflex response to his memories. He was able to control himself to large extent at work, but this control failed him toward evening when he was at home. Therapy was directed toward desensitizing him to his childhood memories by airing them completely and removing his attitudes of hostility, and by hypnosis directed toward relaxation of all his muscles as well as those involved in his tic. There was marked improvement after the first few visits, but the complete cessation of his symptoms did not occur until after many months of therapy.

Pain Beneath the Sternum.²—Pain beneath the sternum, heaviness on the chest, a lump in the throat are not infrequent physical manifestations of emotional difficulties. The mechanism for the production of these symptoms may be spasm of the smooth or striated musculature in the larynx and esophagus, but the relief of these symptoms is produced by relief of generalized spasm and tension.

Mrs. K. I., aged fifty-four years, complained of constant pains in her chest, going from side to side and associated with a feeling of oppression. The pains were not particularly intense but they were constant, and the patient "imagined" every conceivable complication from cancer to heart trouble. Not obtaining any satisfaction from local physicians, she traveled to a famous clinic where the absence of physical disease was confirmed and the patient returned to Chicago unrelieved.

¹ *Vide* p. 230.

² *Vide* p. 91.

She was married to a fairly successful business man who, however, drank frequently, and attended parties alone. His wife would wait up for him and there would be frequent clashes and stormy scenes. During the day she brooded constantly, and she could not fall asleep waiting for him to come home. "It was like a knife going through me to have him call and say 'he had to go to a business meeting that night.'" The pains in her chest developed after one such telephone call. The children had grown up, married and left home so that the patient had no one to confide in, and no immediate interest in which to lose herself. The husband labeled the wife a "nag," and refused to change his ways of living, unless his wife "acted differently." Divorce was not possible. The only solution was for the patient to attempt so to change her attitudes and manner of living that she would be less concerned about her husband's indiscretions, and at the same time more occupied and interested herself so as to have little time for reflection on her problem. Moreover, she had to realize that "nagging" serves only to defeat one's purpose, and she had to learn to control herself on this score. By following this procedure and with the occasional aid of $\frac{1}{2}$ grain phenobarbital (she had been taking as much as $1\frac{1}{2}$ grains t.i.d.) she lost her physical symptoms. She was far from happy, but she managed to readjust her life sufficiently so that she secured the return of some measure of self-respect and some degree of peace.

Asthma.—Asthma¹ is a controversial topic. There are some who say it is entirely the result of the influence of some sensitizing protein, and there are those at the other extreme who insist that it is purely a "psychic" disease. The question, however, would appear to be rather how much of a particular asthmatic reaction is organogenic and how much is psychogenic. There are probably many cases which fit fairly well into one or other causation; but as a rule, asthma tends to occur in tense, determined persons, or in those who have some manifestation of neurosis. One physician quotes the case of a patient who is sensitive to ragweed pollen and who has typical asthmatic attacks in the ragweed season, but who, interestingly enough, does *not* have these attacks when his mother-in-law is *out* of town! Emotional tone always plays a role in these patients; in some it plays the major role. Effective treatment depends on a true analysis of the factors involved with adequate treatment toward all the causes.

Mrs. O. G., aged fifty-three years, had severe asthmatic attacks which were unrelieved by medication. She was sensitive to ragweed pollen, but her attacks began early in the summer and lasted far into the fall. Occasionally, she had attacks in midwinter. Adrenalin would bring some relief but this would be temporary. Sedatives, desensitization procedures, rest in bed, a sojourn in northern Wisconsin during the ragweed season, all proved futile. The patient had to stay in bed and "suffer" for long periods of time.

¹ *Vide* p. 92.

This woman was a very intelligent, unselfish person. She belonged to many social groups, worked diligently and conscientiously with little thought to her own welfare. Her finances were limited, but she would contribute out of her food money for some worthy cause. She had many friends and was married a second time, seemingly content and companionable with her husband. Her only son was a professional person and had been married for several years. Superficially there seemed to be no discernible emotional causes of tension.

A close friend, however, suggested that the patient was concerned over her son; and with this clue it was possible to direct discussions with the patient so as to reveal the following. The patient who had come from Europe in her teens had lived her childhood against a deplorable background. She had become an intense person, matured too early for her years, and cherished deeply whatever was close to her. Her only child gave her an outlet for her sympathy, and she gave to him the love which she had always desired and had never experienced. She struggled against many odds, and even after her first husband's death labored to send her boy through school and into professional life. She had dreamed of his future and gloried in the idea of being by his side throughout life. When after graduation, her son spent little time with her, she consoled herself with the belief that he was busy and had little time for persons outside his work. When, however, he married, and her daughter-in-law, jealous of the mother's attention and suffering from emotional difficulties of her own, managed so that her son saw her hardly at all, she broke down completely. Her breakdown, however, came with the onset of an acute attack of asthma. Skin tests revealed ragweed sensitization, but the attacks were continuous and unrelieved. For several years these attacks continued, becoming more and more severe.

The therapy in this situation was directed toward bringing to light all these conflicts, and getting the patient to view them objectively. Her own overly intense attachment¹ to her son and the dreams she had of being by his side throughout life were shown to her to be both impracticable and undesirable. Children when mature must lead their own lives, and no parent should expect to remain the center of their attention. The children have their own problems which often unwittingly make them forget about home. Children often are needlessly selfish and thoughtless, but the parent must think back on his own life, and understand the nature of things. Moreover, no parent should put all or most of his life into rearing children.² Parents need other interests to balance them and keep them from being so involved in the lives of their offspring as to render both themselves and their children unhappy. These facts she had to learn. She needed to understand life in a manner different from that which she had accustomed herself to. She discussed her "emotional" ideas and wishes, and viewing them in the mirror of the psychiatrist's interpretation saw reflected

¹ *Vide* p. 203 ff.

² *Vide* p. 205.

undistorted and objective wishes. The changed attitude brought about in several weeks of discussion resulted in complete relief of her asthma. The only medication used was $2\frac{1}{2}$ grains barbitol p.r.n. The life-long tendencies and sympathies and desires were not removed; but by virtue of a sympathetic presentation of a more self-disciplined and less emotional way of living she obtained sufficient objectivity to start in the direction desired, and to remove the tension which in large part had produced the asthma.

GASTROINTESTINAL SYSTEM AND ABDOMEN¹

The gastrointestinal tract is particularly subject to disturbances of emotional tone. A possible reason for this sensitivity is the rich sympathetic and parasympathetic nerve supply existent in almost every part of the abdominal viscera, plus the existence of a motile structure, the muscles, which may respond quickly to stimuli, the response being by spasms. Moreover, the brain has a close relationship to the stomach and intestines, via the hypothalamus. It has been found that perforations of the stomach and intussusception may occur after operations on the diencephalon. Whether these connections are primarily by means of nerve impulses, or via hormonal activity is as yet not definitely established. At any rate, many gastrointestinal symptoms are commonly spoken of as being the result of emotional upsets.

Difficulty in Swallowing.—Difficulty in swallowing is a common complaint. It is usually referred to as a “lump in the throat,” and is probably associated with spasm of the throat and upper esophageal muscles. It has frequently been termed a cardinal symptom of hysteria, but it is one of the symptoms of tension which may be present in any of the neuroses.

Mr. N. T., aged twenty-two years, complained of a burning sensation in his throat and a difficulty in swallowing. This symptom had existed for two years. Since no physician had been able to find any definite pathology, it was hypothesized that he had hyperthyroidism (even though the B.M.R. was only plus 5) and he was treated with Lugol's solution. The symptoms were temporarily relieved but soon returned in full force. On further investigation I found many other psychoneurotic complaints but they were subordinated in the patient's mind to the above. The history in part is significant. The young man suffered from an overly devoted mother who wished to protect her darling from all harm and desired him to be perfect. She had taken him to Florida for “a rest.” “The first time I got this trouble in swallowing was one day when we were walking along the board-

¹ Vide p. 93 ff.

walk. Mother kept talking to me about how terrible it was that I had taken a drink the night before. She kept bawling me out, over and over, and I begged her to stop it even for a minute; but she kept right on, and I suddenly became faint and couldn't swallow my saliva. Since then I can't swallow food, even though I'm hungry." Behind this apparently simple precipitating factor was an entire background of an unemancipated, over-dominated child. When this basic factor was treated, by counselling with the mother, and by training the boy, the symptoms disappeared and did not

Fullness, Tightness.—Fullness, tightness, "a knot in the pit of my stomach" are symptoms which may be the forerunner of active organic gastric pathology. They also, however, are common symptoms of emotional difficulties. The heart and gastrointestinal tract are exceedingly sensitive to the influence of emotions. "Normal" persons develop a "lump in the stomach" on hearing some distressing news, or on being frightened in some way. In chronic emotional disturbances these sensations tend to persist. Their most probable physical basis is pylorospasm.

Miss K. D., aged thirty-eight years, was referred after x-ray and laboratory examination because of a constant feeling of heaviness in the epigastrium over which the patient appeared unduly distressed. The examinations had not revealed any organic pathology. Psychiatric history revealed an emotional upheaval following disinterestedness by her "boy friend." In her lonely unmarried existence, such a loss was a tremendous calamity second not even to loss of financial support. She was wounded deeply, and the conflict resulted in the tension which in turn resulted in her symptoms. Once a patient has a focal point of complaint, it serves to draw one's attention from the main difficulties and provides an outlet for the pent-up energies. Such dissociation then goes to the point where the patient insists that all would be well if only his symptom cleared up. But the symptom cannot be cleared up until the basic causes are remedied. Therapy in this instance was rather simple for the causation of the illness was primarily the loss of her escort and she was able to reorient herself quickly, particularly when she plunged enthusiastically into social and recreational life.

Hyperchlorhydria.—Hyperchlorhydria or "acid indigestion" may be either indicative of an early stage of peptic ulcer or an expression of anxiety, or both. Many patients feel pain, burning, and heaviness "in the stomach" after eating; but on more detailed questioning they reveal that these sensations occurred before eating and also at other times of the day. Not infrequently an Ewald test meal reveals a great amount of free acid in the stomach, but there is no direct laboratory evidence of ulcer. These symptoms tend to disappear very quickly under psychotherapy and without any change in diet.

Mr. O. P., aged twenty-eight years, had persistent "acid stomach" for which the medical department could find no organic cause. In addition he spoke of being nervous and easily irritated. He had been out of work for several years and was worried about his future. However, he admitted that he had been worrying for many years before his loss of position. At the age of seventeen, he had contracted gonorrhea and this was followed by constant fears of impotence and sterility. The memory produced a constant aggravation, and so the patient deprived himself of all female company. His tension manifested itself in part by this hyperchlorhydria. Therapy was directed toward giving him exact knowledge as to just what happens after gonorrhea (an examination had revealed no pathology), toward removing his tense attitudes, and toward better social readjustment. Incidentally, in one month, the patient reported a gain of 6 pounds in weight, although he had not consciously increased his food intake. This gain in weight is frequently seen after psychotherapy; possibly it is produced because of increased appetite, through less energy consumption in agitation, and by improved processes of digestion.

Peptic Ulcer.—Peptic ulcer¹ may or may not be secondary to psychologic difficulties, but regardless of the original causation, ulcer symptoms are markedly influenced by emotional states. Patients who may have their ulcer "under control" will have a recurrence of their symptoms when subject to intense concern. The ulcer syndrome may prove recalcitrant to treatment in the presence of apprehension, anguish, or fear. A "silent" ulcer may manifest itself in periods of tension. Pains may be more intense and the subject suffer more distress in these situations. As a consequence, in the therapy of peptic ulcer it is important to use, besides diet and medication, psychotherapy. Correction of unhygienic patterns of reaction by removing emotional instability may be the determining force in obtaining cures.

Mrs. S. L., aged fifty-two years, complained of pains in the "pit of the stomach" and below the left scapula, occurring from one-half to one hour after meals. The pain was burning in character associated with sour eructations, and was worse after eating meat. Relief was obtained by using baking soda. Gastric analysis revealed a high free acid content, and x-ray films showed a persistent filling defect in the duodenal cap. The diagnosis of duodenal ulcer was made and the patient was placed on a milk diet and alkalies. The patient responded well and was symptom free for about three months, when the symptoms recurred. An indiscretion in diet was said to be the cause. Removal to a hospital was necessary in order to bring about complete relief of symptoms again; but thereafter the ulcer symptoms would recur at irregular intervals and at times when the patient insisted that she was following her usual routine in eating.

¹ *Vide p. 95.*

A psychiatric consultation revealed a self-contained, well poised person who, however, appeared somewhat tense. She had three children all of whom were adults. She had separated from her husband several years before and was living on the earnings of her oldest son. This son had obligations of his own, and though he gave willingly, the mother grieved, feeling that she was depriving him of some of his needs. She insisted on taking only enough to provide for her minimum needs. One daughter was married, had one child, and a husband who was an alcoholic and who finally ceased to earn a living so that it was necessary for his wife to go to work. The patient stayed home with the child, and witnessed the violent altercations between her daughter and son-in-law. She dared not interfere, and "had to keep everything I felt inside." The other daughter was unmarried, and being without work was irritable and restless. This background made for an almost unbearable situation, and every attack of ulcer symptoms could be traced to some violent outburst or disturbance in the environment. The very nature of the environmental stress made therapy difficult. Psychotherapy was directed toward showing the patient the relationships between her symptoms and emotional problems;¹ toward trying to develop as much as possible an attitude of passivity and objective calmness; toward creating outside interests and diversions.² This régime definitely alleviated but did not entirely remove the symptoms. Within the following year her youngest daughter married, her son's financial condition improved, and the alcoholic son-in-law disappeared, permitting his wife to adjust on a difficult but certainly less irritating level. As time brought about these changes, the ulcer symptoms gradually subsided and finally on a relatively meat-free diet the patient remained completely well during the follow-up period of three years.

"Nervous Stomach," "Quivering Inside," "Hungry But Can't Eat."—These are common complaints. Very rarely however are these the sole complaints; as with other neurotic complaints, they are generally but a few of the symptoms in a constellation of psychoneurotic features. In therapy the patient is given some such explanation:³ "Your stomach is just as irritable as you are. When you hear the slightest noise you jump; when you are irritated, every muscle in your body is irritated and jumps, including the muscles of your stomach. The quivering inside you is but a reflection of your quivering outside. When you put food into your stomach, the stomach is too irritable to be relaxed and

¹ *Vide* p. 131 ff.

² *Vide* p. 253.

³ *Vide* pp. 181; 219.

hold very much, and so you feel full with very little, although you seemed quite hungry at the outset. The treatment of your irritable stomach is to remove the cause, which is your general irritability."

Mrs. C. O., aged thirty-eight years, complained of nervousness, feeling quivery in the stomach, and general trembling. This condition had been present for several years. She spoke of being hungry but said, "as soon as I have one or two bites I feel full and can't eat any more." There was a constant "trembling inside" and this would come on whenever there were periods of tension. Sedatives of all sorts had been given her with relatively little effect.

This patient on questioning spoke of herself as "always having been nervous." She told of her early years, of her strong affection for her father who was very kind to her; of her shyness, timidity, and overwhelming sense of duty and prudishness. There was little in the way of external stress but modesty, shyness, and propriety were always overemphasized. The patient never learned these in proper balance, but overevaluated them to the point where she remained continually unhappy at her inability to live up to what she termed "adequate standards." She came to the point where she thought of "earthly pleasures" as sinful. When she married, therefore, it was from a sense of duty, to relieve her parents of herself as a burden and to bear children. The sexual act was not only distasteful but left the patient in a state of tension and hysterics after it was over. She had four children. Her husband never shouldered any responsibilities; he turned over his check to the patient who then managed the household affairs. When any question arose, the husband evaded the issue by telling her that she had the money and could do what she wished. To the neighbors she appeared fortunate in having that sort of husband, but she felt keenly the absence of someone whom she could look up to, someone as strong and powerful as her father. (Psychoanalysts would speak of this attachment as an Oedipus situation: see Appendix I). The strain of these various factors had made for her "constant nervousness." Several years earlier her son had been apprehended as a member of a gang engaged in stealing automobiles; and to a person of her moral scruples, this experience was a most difficult blow. She became nervous and upset, easily irritated, and could not do anything without her hands trembling. She lost her appetite and felt "quiverings" in the abdomen. After a few weeks her appetite returned, but as soon as she would eat she would vomit. This symptom disappeared, but thereafter although she would be hungry, she would "feel full" after a few bites.

Therapy for this patient was a long term one, directed at so reorienting her personality as to obtain satisfaction and pleasure out of "normal" pastimes. This end was accomplished, first, by discussions to remove all her intellectual objections, and then by directing her into one social activity after another until she reacted favorably. For example she never in her life had appeared on a beach in a bathing suit, because it was "immodest" and she was persuaded to go swimming with her neighbors. Again, after dinner, her family would visit friends or go to a motion picture, while she felt that it was her duty to stay home, clean up the house, and sit

up until they returned. She was persuaded to change, to be firm and insist that her two daughters and daughter-in-law help with the housework, and then to go out with them. This patient came once a week to the dispensary for over a year. After the first month there was a marked improvement, and her eating became normal. However, to pronounce her cured at that point would have been fallacious, for the background of excessive inhibitions remained; and it was necessary to continue with the therapy until her personality was fairly completely reoriented. She has been seen twice a year since then and is a different person, according both to herself and her friends.

Constipation and Diarrhea.—Constipation and diarrhea¹ may be spoken of together, for particularly when without “organic” etiology such as dysentery, obstruction, etc., constipation often alternates with diarrhea. Homeostatic² phenomena are an essential part of physiologic processes, and when one extreme is present in the body, these processes tend to swing to the other extreme continuing until the normal balance is reached. However, constipation is by far the more common and is of greater duration than the diarrhea. The whole subject is too complex to present in detail in this book, and only a few of the facts relating to it can be reviewed. In health there is a formed fecal movement about once a day. In some it may occur several times a day, and in others once in several days. The person feels the urge to defecate and responding is able to empty the lower rectum easily. Usually the entire process is an uncomplicated one performed automatically. In modern life, however, there are many disturbances which interfere with this automatic process. One of the most important interferences is the rush and hurry demanded by our existence. Many persons rush to stool, and strain, doing what they can to force the process. If no immediate results occur, they leave the toilet. Constipation results. The peristaltic waves of the intestine are usually not in a hurry, and this bustle and rush of the person are not conducive to intestinal activity. By the same token as above, those who are in such a rush are generally tense, and there fails to be adequate relaxation of the anal sphincter, which again retards evacuation. Moreover, tension is accompanied by an alteration of the intestinal peristalsis which also interferes with evacuation. In addition, there are many sensitivities and fears connected with the elimination processes. Women particularly are subject to an exaggerated false modesty which prevents them from going to the toilet or staying there any length of time when they are among people.

¹ *Vide p. 95.*

² *Vide p. 217.*

As a result constipation occurs, with irritation of the bowel and the advent of other symptoms. But even men have such a false modesty. One person, a man, aged forty-two years, would hesitate to go to the toilet when visiting the home of his friends. If he did go, he would turn on the faucets and even the shower, in an apparent and obvious effort to drown out any sounds of urination. At times even this was not sufficient and he would leave the house on some excuse, so that he could go to a toilet in a hotel or other public place. It is an interesting symbolism that he would return on these occasions to the home of his hostess with a purchase which invariably consisted of bananas! All these and other "psychic" factors play a large role in the development of fecal retention.

Even more important, however, is the effect of emotion on the intestinal tract. Peristalsis may be increased, decreased, or normal. Fear and anger tend to produce spastic-like conditions lasting for the duration of the emotion. When fear and anger become mixed and chilled and constant, when irritation, resentment, or despair are prevalent and persistent, the spastic states also become constant and persistent. In those persons in whom the gastrointestinal tract is for some reason predisposed, there may develop ulcers, spastic colitis, or mucous colitis. In these persons the primary "cause" of the focal illness is the general emotional disturbance.

Spastic Colitis.—Spastic colitis¹ has for some years been a "fashionable" diagnosis. The diagnosis is based on an account of abdominal pains or cramps, diarrhea alternating with constipation, and x-ray findings of excessive contractibility of the colon. The patients suffering from this condition are said to be nervous and irritable as a result of their spastic colitis. However, the reverse is generally the case; namely, that the nervousness and irritability come first. Accordingly, treatment of the condition of the bowels should be directed toward the treatment of the causes of the "nervousness."

Mucous Colitis.—Mucous colitis has a similar background, except that it is one stage further than spastic colitis. The appearance of mucus in the stool points to a more intense aggravation of tension. Should the tension become less the mucus may disappear and permit the more simple "spastic colitis" to appear. The difference is a matter of degree.

Mr. S. B., aged forty-two years, complained among other things, of marked constipation. He spoke at great length about his difficulties, about the amount of medication necessary to produce a bowel movement, about

¹ *Vide* p. 95.

the constant abdominal discomfort and the scybalus or tape-like form of the feces. When he was "very nervous and upset" much mucous would be present but that condition occurred only in very disturbing situations.

He was at one time a manager of stock show companies, but he lost this position soon after 1929. Since then he had worked in various capacities, usually as a salesman and would "have a lot of grief with the jobs." He and his wife lived precariously, and he finally took to drink because the "going was tough." He developed delirium tremens in 1937 and was sufficiently frightened to discontinue drinking. However, he began to notice increasing difficulty with his constipation; and the symptoms continued to become worse until he was seen in 1939. His wife reported that he was a dominating, overbearing person, who was petulant and who sulked if things did not go his own way. He worried constantly and kept criticizing all those about him. He was impatient, tense, and was troubled by insomnia. It was difficult to persuade him to come for therapy "which was talk and not medicine" and after the first visit he did not return. Six months later he returned for treatment and decided to attempt changing his personality. The appearance of a steady position enabled him to feel more secure. Psychotherapy was directed toward changing his personality traits, and increasing his tolerance of himself and others. Gradually his cramps and mucous cleared up, but two months after treatment there still remained some constipation. The medication used consisted of barbitol $2\frac{1}{2}$ grains p.r.n. Warm water enemas were used occasionally. The employment of drastic cathartics was avoided because the bowel spasm, ushered in as it may have been by emotional difficulties, could be aggravated by any irritant cathartic and recovery thus be delayed.

Pseudo-appendicitis.—Pseudo-appendicitis has also come into vogue among apprehensive persons who have read a good deal about appendicitis. In these cases, there tends to be constipation and what has been termed "spastic colitis" but the specific complaint lies in vague or sharp pains occurring intermittently in the right lower quadrant, without fever, general cramps, or other signs of acute inflammation. The abdomen is soft, and mild tenderness is often present in all quadrants. The fears of the patient often keep such pains alive, and many an unnecessary appendectomy is carried out because of the patient's insistence.¹

"Gall Bladder Pains."—Gall bladder pains without any demonstrable pathology are not infrequent. These pains are, however, typical of actual pathology. The pains are constant or intermittent and often without definite relation to food. They radiate across the chest and to all parts of the abdomen. They are associated with many other aches and pains, such as the headaches and weakness found in psychoneurotic illness. Finally, they produce weakness and prostration out of all proportion to the clinical findings. Nevertheless, it is extremely difficult to make a differential

¹ *Vide* p. 279.

diagnosis at times. In many instances there may be some basis of actual pathology, but the emotional tone enhances the subjective findings to the point where operative procedures are carried out. Frequently these pains are the result of spasms of the bile ducts which operate in such a way as to cause a "real" blocking of the gall bladder. Whenever the surgeon finds after operation, that the symptoms were out of proportion to the degree of pathology, he should arrange for further personality study of the patient, if he wishes that the symptoms do not return. As long as the emotional problem remains unsolved, relief from symptoms by other methods will be only temporary.

Mrs. B. U., aged thirty-six years, complained of severe "gall bladder" pain. These symptoms were particularly over the right hypochondrium and were so severe that she was invalided. She had just been hospitalized for several weeks in the County Hospital, and x-rays and stomach tests had revealed nothing. Neurologic examination was negative. Mrs. U. told how her symptoms had originated seven years ago with similar pains. She was treated by several doctors, and finally the pain became so severe that she had to be operated upon. On operation the surgeon found that the gall bladder was "normal" and so he removed the appendix. After operation the patient was well for several months and then the symptoms recurred and continued in full force.

On more detailed questioning the patient admitted to suffering from headaches which were very severe; of occasional blurring of vision which did not seem to be helped by the glasses prescribed for her, of a frequent choking sensation in her throat, which made her inquire anxiously about a "goiter," of pains which spread from the "gall bladder" area to the heart which palpitated often; of vague and peculiar sensations "which flitted through her legs and made her knees "weak" and prevented her from much walking. The patient was an excellent demonstration to the students of a frequent type of psychoneurotic patient whose presenting complaint focused attention away from the more general complaints, and the more general complaints included practically every portion of her body.

Mrs. U. came from Italy at the age of nine. She was the only daughter and at fifteen, when her mother was ailing, was given in marriage in order that the mother would not have the responsibilities of an unmarried daughter. The patient accepted her lot with stoicism: the man she had married was, according to her standards a "good man"; he did not drink and was good to her. They had three children and the struggle for existence was hard. In 1932, their life savings were lost in a bank crash, and the patient became quite depressed. Shortly thereafter a miscarriage occurred and the patient was so disturbed that in spite of repeated menstrual periods, she kept feeling the movement of a child in her abdomen. Everything "seemed to happen at once" and her husband lost his position and the family had to go on relief. Soon thereafter she developed pains in the upper abdomen. There may have been a predisposition to the site of the pain, in that she was a stout "gall bladder type."

On discussion she admitted that she was always worried, and that the symptoms were all over her body. She admitted that she thoroughly enjoyed the sympathy and commiseration of her friends, and the consolation thus obtained because of her troubles and sickness that baffled all specialists.

In therapy, it was necessary to be very insistent that she change her social situation: that she go out into company regardless of how badly she felt;¹ that she make a firm promise not to discuss her ailments with any one except the physician; that she give up bemoaning the difficulties she had had in the past. The aid of her friends who came with her was enlisted,² and they were instructed in her presence to "help her forget" by changing the subject should she talk of herself or her difficulties. Strong reassurance³ was given the patient that she would get well, and that "the pains which were present in all parts of her body were the result of 'irritable nerves,' which in turn were the result of an irritated 'mind,' which could be cured by giving it an outlet in activities." The immediate relief of symptoms seemed almost miraculous. After several weeks, however, they returned again; and further explanation and insistence on mental hygiene principles had to be carried out for many months before she accepted and made automatic the new way of living.

Itching and Pain About the Perineum.—This is not infrequent, particularly following vaginal or rectal operations. The surgical procedures focus the interest on the area, and the emotional tone, particularly because of the added erotic nature of the area involved, serves to produce these symptoms.

Mrs. I. Q.⁴ had a fibroid uterus removed by vaginal operation. After the operation she convalesced well, and then four days later developed an intense burning and itching about the rectum and vagina. Ointments, heat, and deep diathermy were without avail. The patient spoke at great length of the trials and tribulations to which she was subject, and the lack of attention from her family, friends, and even physician. Discussion with the patient about these emotional difficulties, reassurance, not so much about the physical as the personality problems, resulted in removal of her symptoms in the two succeeding days.

GENITO-URINARY SYSTEM⁵

The kidney and ureters are relatively automatic and independent of emotional tension. More commonly affected by tension, is the act of urination, and the tension may show itself by frequency, by precipitancy, by retention, etc.

¹ *Vide* p. 253.

² *Vide* p. 131.

³ *Vide* p. 222 ff.

⁴ *Vide* p. 64.

⁵ *Vide* p. 95 ff.

Frequency of Urination.—Frequency of urination is much more common among children than adults. When children develop a neurosis it is called a behavior problem, but the mechanisms involved differ little in most respects from those of the adult. Increased frequency is found among many so-called “normal” persons, and in these instances is not constant but fluctuates with the emotional state. On closer observation one finds that many of these same persons can retain their urine for an abnormally long period of time. In the first instance, the bladder is irritable; while in the second, it is relatively insensitive. However, it is not accurate to speak of the bladder as being irritable, indicating thereby a relationship as it may to the bladder irritability associated with inflammatory and irritative illnesses of the bladder. Rather, in the cases of tension frequency and tension retention, there is a change in the excitability of the bladder walls, and vesical sphincter: an excitability integral with the general state, and probably mediated by changed tone in the autonomic nervous system. In these disturbances of urination, minor physical changes often act as the precipitating element; and while in themselves they would be innocuous under other circumstances, they serve to focus the tension on the bladder. For example, concentrated urine, excess phosphates and oxalates, mild endocervicitis, chafing clothing may by themselves have no effect on the bladder irritability but when associated with general tension, will serve to bring about frequency of urination.

Precipitancy.—Precipitancy is but a degree of frequency, just as *delayed starting* of urination is but a degree of *retention*. In the latter instance, the vesical sphincter is spastic, and by reciprocal enervation, the bladder is relatively atonic. As far as therapy is concerned the patient's personality reactions require most attention, and changes thereof will bring about results, even if the apparently irritating local cause is not removed. However, limiting or increasing the fluid intake may be of value for cases in which there is frequency of urination or concentration of urine, respectively. Removal of the focal cause always has some measure of success; but rarely is it in itself sufficient, though the suggestion accompanying it may be important.

Miss G. J.,¹ a stenographer, had precipitancy of urination particularly when she went to take dictation. The generalized tension was associated with her fear of going out into open spaces and brought about not only this extreme urgency in moments of tension, but also brought about a

¹ *Vide p. 212 ff.*

diarrhea. When going to the urinal under these circumstances, she passed very little fluid and there was no subsequent feeling of relief. Repeated examinations showed no evidence of infection, kidney disturbance, or other pathology. The question of some inflammation or swelling in the bladder was also ruled out by the fact that for long periods of time she had no frequency and under certain conditions, such as being embarrassed from false modesty, in a social gathering, she could retain the urine for long periods of time.

The therapy was directed primarily at the cause which was in essence a life-long fear of what others might think of her;¹ toward a deeply ingrained inferiority complex;² toward the desire and need for the affection from her parents which was denied her because of the emotional disability of the parents; and toward an unfortunate love affair.

Mrs. I. L., aged thirty-four years, had a tension depression. She had, for little apparent reason, lost interest in people, in events about her, in her husband, and in her home. She was depressed, and felt inadequate to carry on the day's activities. She developed insomnia, constipation, loss of appetite, loss of weight, and loss of libido, in the fashion of the usual manic-depressive depression.³ In addition, she kept insisting that there was nothing the matter with her, that it was her own fault that she was blue, that she was worthless, and it would be better for her and her husband if she were to die.

She was given a course of metrazol shock therapy, and practically all of the depression left her after 6 convulsive doses. The treatment was discontinued then because of the marked muscle pains; and being unable to have the completed course, she still retained some of her tension. She began to have frequency of urination, going every hour to the toilet, but passing only an ounce or so of urine at a time. Examination showed no abnormality in the urine, and there were no other indications of disease. The patient was tense, fearful at times, and very anxious to get back to doing what she used to do; but she was prevented by some of the residual depression; and in an effort to overcome this depression and force herself to do what was very difficult to do, she developed tension which reflected itself in the urinary frequency.

This patient had to be told not to try so hard to get well, and to wait until she returned to normalcy before expecting so much of herself. It was difficult to get the patient to follow this advice for part of her depression was the result of her personality trait to get things done regardless of the cost to her in energy and restlessness. She was taught to relax,⁴ however, and her frequency of urination disappeared.

Retention of urine after operations is not an uncommon finding.

¹ *Vide* p. 217.

² *Vide* p. 63.

³ *Vide* p. 404.

⁴ *Vide* p. 248.

Miss T. E., aged thirty-two years, had a cholecystectomy. Following the operation, she made an uneventful recovery. However, from the beginning she had to be catheterized; and two weeks later, still could not pass her urine. On occasion she would go twenty hours and distention would become great and catheterization necessary. Hot packs, belladonna, and straining by the patient were to no avail. Miss E. was dependent solely on her earnings, and the acute attack of cholecystitis, and the hospitalization created expenses which she did not know how to meet. She was very anxious to get well quickly and did all she could to follow directions: the over-intensity in following directions, in the setting of financial distress was sufficient to cause spasm of the sphincter and urinary retention. When she was taught to relax (by the use of hypnosis in the beginning),¹ the retention disappeared.

DERMATOLOGY²

The skin often reflects the emotional tension of the patient. The mechanism by which this influence takes place is not clearly understood. It is possible that the *impairment of circulation*, seen grossly in pallor and blushing under the influence of emotion may, if chronic and long prolonged, produce local physical changes; or disturbances in the balance between the sympathetic and parasympathetic systems which are so common in emotion, may play some *trophic role*. Regardless of the mechanism, however, the effect is definite. It may involve the sweat glands with excessive perspiration; it may involve the peripheral circulation and produce cold hands, or warm hands, or a feeling of warmth or chilliness, pallor or blushing; it may involve the skin sensibility with the "sensation" of anesthesia, paresthesia, or hyperesthesia; it may involve the skin elements with abnormal changes as seen in eczema, warts, non-specific urticaria, and other "neurodermatosis." In those persons in whom there are definite skin changes,³ the emotional influence has generally been present over a long period of time and most of these persons are sensitive, intense, and "driving" in character. At first questioning, these patients will often deny the existence of any emotional trauma, and will insist that they have no more difficulties than the ordinary person. This statement is in itself usually true; *i. e.*, that they have no more difficulties than the average person, but their *attitude*⁴ toward these "ordinary" difficulties and their response to them are different from the average. Their general response is one of intensity, restlessness, driving ambition, discontent with their situation, or secret remorse and anger over some past or present difficulty,⁵ all of which prey upon them. There is relatively little in the way of a precipitating

¹ Vide p. 230.

² Vide p. 97 ff.

³ Vide p. 319 (Case S. L.).

⁴ Vide p. 157.

⁵ Vide p. 211.

factor; but there is much in the way of a chronic factor. For these reasons and others, therapy is slow, and must be thorough-going. Often therapy of the skin lesion amounts to a complete changing of the personality. Many of these patients are rigid, and tend to be unyielding to advice and suggestion, even in ordinary activities. Clearing up of these neurodermatoses is more difficult than removal of many other emotionally conditioned physical symptoms.

Perspiration of the palms of the hands and of the feet is one of the most common symptoms among the neuroses. Presumably it is the result of excess activity of the cholinergic fibers (even though they travel with fibers from the sympathetic nervous system) and it indicates an overactivity of the autonomic system. Usually the palms and the soles of the feet are involved, but in some persons, perspiration may actually drip from the axilla, beads of sweat may stand out on the forehead and chin. The cheeks, arms, trunk, thighs, and legs rarely perspire as the result of tension; and it is interesting to observe in connection with the mechanisms of tension and of heat dissipation that many persons will at one time perspire profusely on their hands and not on their body; while at another, under violent physical exercise, they will have dry palms and a perspiring body. The treatment of this excess perspiration of the palms of the hands is the same as the general treatment of the neuroses.

Cold and bluish hands have a similar genesis. Adolescent persons are particularly liable thereto. Similarly a sensation of chilliness or warmth at variance with others in the room is not uncommon. The basal metabolic rate in such instances tends to be somewhat below normal. Many persons, for example, are said to be hyperthyroid, partly on the basis of this warmth; but a more precise history will reveal that the feeling of warmth will vary with that of chilliness, and that the basal rate is often 10 to 15 points below 0. In some adolescents the hands may have almost a cyanotic character without any physical defect discernible on clinical or laboratory examination. In these patients the main complaint is not directed toward the hands, but toward the "stomach" or "heart" or "nervousness," and the treatment should be directed similarly to the causes of the more general complaints. When the specific difficulty clears up, the perspiration, the cyanosis or the coldness of the hands will also disappear. In many instances the actual status of the vasomotor control may be dependent on the constitution of the nervous system.

Blushing and pallor (vasodilation and vasomotor spasm) may even be spoken of as "normal," under appropriate emotional stress; they become abnormal when they appear frequently and from very little stress. In many persons, the neck and face becomes a mottled pink as they struggle to control the emotion aroused by some stimulus. Here, again, the line between normalcy and abnormalcy is vague and dependent on the frequency and facility of the symptom's appearance. In some instances this symptom may be a presenting complaint; in others it may be part of the personality expression and its cure or removal is best brought about only by a fundamental alteration in the personality attitudes.¹

Disturbances in skin sensibility without actual nerve injury are really part of the symbolic process.² The skin is probably not involved, the fault lying instead with the receptors in the brain. Absence of sensation, numbness, burning, "crawling feelings," all need close investigation. When a patient presents such complaints, great care must be taken to investigate all possible sources of damage to the nervous system; for some of the earliest signs of pernicious anemia, of syringomyelia, alcoholism, peripheral neuritis, diabetic neuritis, etc., may manifest themselves in this way. One patient, a young man, aged twenty-seven years, complained of many obvious psychoneurotic ailments, among which was a peculiar sensation on the outer aspect of both thighs. A general examination revealed no pathology, and the patient improved remarkably under psychotherapy. He gained weight, "felt better than he had in ten years," and most of his symptoms disappeared. Five years later, when this patient was again seen, he had developed a full-fledged syringomyelia, and the anesthesia of his thighs was on an organic basis. The fact that in addition the patient had many psychoneurotic features which yielded to therapy did not exclude the fact that like any other human being he might also have an organic lesion. The two symptom complexes were unrelated for the most part, one being the result of his concern over a gonorrheal infection in youth and a consequent avoidance of women even in ordinary social contacts, and the other being the result of cavitation in the center of his spinal cord.

The variety of complaints along the lines of sensation disturbances is astonishing. One young man, aged twenty-five years, for example, complained of a tingling in his arms, the sensation at times spreading to his legs. This peculiar sensation occurred only when he was expected to address an important meeting, or have an

¹ *Vide* p. 69 (Case X. F.).

² *Vide* p. 33 ff.

important business conference. The basis for his complaint was a general apprehensiveness, the result in large part of a mild manic-depressive depression. The treatment of these ailments here, as elsewhere, is the discovery and removal of the cause.

Eczema is closely related to tension. *Psoriasis*, *non-specific urticaria*, and many other neurodermatoses are found in persons subject to tension. The specialist is liable to center his attention on only the one sphere, and overlook the fact that the patient at the same time may be suffering from other ailments than that involving the skin. One patient with psoriasis had a peptic ulcer; one with psoriasis had an intense agoraphobia; one with eczema of the hands and neck had spastic colitis; one with a general "neurodermatosis" had intense anxiety feelings, etc. A more intensive study of the background will aid in determining the etiology of the disease of the skin, for tension symptoms tend to show themselves in several parts of the body at the same time.¹

The treatment of these skin conditions by psychotherapy is made difficult by the rigid personality² so common in these patients. Therapy for the skin illness itself dwells not on the skin at all, but on the emotional cause responsible for it. Other factors (allergy,³ etc.) should be treated simultaneously. Soothing ointments and heat are often of great help: sensitization tests should always be made: no one method should be relied on, but all should be used. The physician as well as the patient will need much patience; but perseverance will bring about the desired result.

Mr. S. L., aged twenty-nine years, had on the back of his hands and his neck eczema which had been present for several years. X-ray therapy as well as soothing and irritative ointments were of no avail.

This man was a lawyer. He had been one of the leading men in his class and had promise of great success. On leaving school, however, he encountered the business depression of 1932, and was unable to establish himself. He finally married the girl he loved, but had to depend in part on her earnings. He was a proud person and could not tolerate the idea of having to depend for his livelihood on the daily work of his wife, whom he wished to see as a home maker. They could not afford to have children because of his financial state, and he developed tension toward all his difficulties. When confronted by a law problem, he was so in earnest and desirous of carrying it through successfully that he would scratch at his hands and neck till the skin would bleed. If he covered the areas with adhesive tape, he would scratch it off in his sleep. Even when he was able to stop the scratching the intensity of the eczematous process would vary with the emotional intensity of the day.

¹ *Vide* p. 323 (Case W. H.).

² *Vide* p. 216 ff.

³ *Vide* p. 92.

In therapy, an effort was made to have the patient accept the situation more philosophically for the duration of its existence. He was also urged to study the opportunities open to him, and come to some common sense evaluation of his prospects in the field of law, and his prospects elsewhere. He finally decided to go into teaching; and after some preliminary preparation, was able to procure an excellent appointment in a small university where he taught business law, where his income was assured, where his wife could cease her daily work at the office and bear him children. Six months after he had procured this position, he was a cheerful, relaxed, happy person from whom all traces of eczema had vanished.

EYE, EAR, NOSE AND THROAT¹

Visual disturbances without any observable pathology in the eye should not be labeled neurotic without a competent and thorough neurologic examination. Inability to see to one side of the body (and the various forms of hemianopia) may be the result of pressure on or destruction of the optic tract, the temporal lobe, or the calcarine cortex. Moreover, the accidental discovery of hemianopia in a patient who is not aware of its existence is not an indication of neurosis. Many patients have an unawareness of their visual defect even though it may involve the inability to see anything to the right or the left of the midline. This unawareness results from the fact that brain tissue is insensitive to pain, so that the growth of a tumor, or as in one case the occurrence of a hemorrhage, is unnoticed as such; and the person does not notice the absence of vision until the visual function is called into play (compare, for example, the unawareness of the syringomyelia patient who is not cognizant that he cannot feel pain, until he sees that his hand or finger is burned by a cigarette).² Moreover, in many of these patients, central (macular) vision is intact so that reading and all visual acuity may be present (one patient who was unaware of his complete inability to see to the left of center told of having several examinations by non-medical oculists who pronounced him perfect as far as his vision was concerned, and who

¹ *Vide* pp. 40 ff; 96.

² These symptoms would indicate that man is unaware of the presence or absence of any of his functions, until his attention is drawn to them by stimuli (external or internal). Similarly, persons may have various characteristics which they despise and of which they are totally unaware.

did not even detect this hemianopia) in spite of the defect in peripheral vision. Visual defects must be carefully studied before they can be pronounced as neurotic.

Changes in visual acuity, are common in patients suffering from neuroses. These changes are more apparent than real. It is not uncommon for a patient to have his glasses changed a dozen times while under an intense but chronic emotional strain.¹ Nevertheless, even in these situations one needs be cautious in making a diagnosis, for some patients with nearsightedness for many years may have an actual improvement in their visual acuity as the result of increased intracranial pressure which may push the elongated myopic eyeball forward enough so that, as in one case with a cerebellar tumor, glasses could be discarded. Thorough examinations are essential before making a diagnosis of neuroses. In children the determination of visual acuity may be a problem because it is difficult to get complete cooperation; and it may be a similar factor which is responsible for the changing refraction error found in neurotics. Patients who are agitated often will return to the oculist daily for adjustment of their glasses, an adjustment necessary because of the patient's general tendency to complain, and not because of any difficulty with the glasses. Many patients complain of tiredness of the eyes or blurring of vision after reading or even on making an attempt to read, and on occasion without reading. Examination of the visual acuity, of the eye muscle strength, etc., reveals no pathology; but a few minutes' discussion with the patient will bring out a vast number of somatic complaints not infrequently associated with a feeling of depression. The reason for the production of these ocular symptoms in neurotic states is unclear. Similarly the reason for the supraorbital headaches which are attributed to eyestrain, but which are part of the psychoneurotic phenomena is unclear. It may possibly be the result of fatigue of the ciliary muscle which is innervated by the autonomic nervous system and is in a constant state of irritability. (Hippus is frequently found in these patients.) In these instances, likewise, treatment is directed not primarily toward the eye, although any error in refraction should be corrected, but toward the basic emotional instability.

The above complaints tend to occur in many psychoneurotic persons, but there may be additional disturbances. These include tubular vision, monocular vision, inconstant diplopia,² or various

¹ Cf. p. 404.

² Vide p. 96.

forms of amblyopia, which on examination by the use of prisms or different colored glasses are demonstrated as symbolic disturbances. In many of these patients charting the peripheral field of vision reveals a spiral narrowing of the visual field as the test is repeated. Here again, however, it is necessary to differentiate between paracentral scotomata and hysterical inability to see.

Frequently *the ear* also may be involved, but here, as in the case of the eyes, the disturbance is more in connection with the function of hearing than with the disturbances involving the anatomy of the hearing apparatus. However, *pains and irritations* may occur in connection with the ear just as in any other part of the body. The etiology of these pains has the same background as the etiology of any of the neuroses.

Mr. Y. R., aged twenty-two years, was referred because of extreme intractable pain in the ear from which he could obtain no relief, and for which there did not appear to be any physical basis. The pain was so severe that the patient pounded his fists against the brick wall when he was seized with a paroxysm, and he insisted that his physician perform a mastoidectomy, or cut the "ear nerves." The patient was a well built man, weighing 190 pounds and standing 6 feet tall. He was all muscle; and though he was powerful physically, his intellectual level was below average and his mental age was between eleven and twelve. He stated that several months prior to the onset of his pain he had been working in the basement (he was a janitor) and an explosion had occurred, deafening him. Not until several weeks later, however, did the pain in his ear begin, and then it was so intense that he could not perform his work.

On closer questioning, the patient at first denied that he had anything to worry about, and then blurted out his general hatred of his existence. In effect he said, "I hate my job. When I go down the stairs, the neighbors they holler at me and they want me to do dis and dat and they make me crazy. I sometime don't collect the garbage till early in the morning before they get up and then I go away where they can't find me. I didn't want this job; but when I married my girl her father said this is a good job and he made me take it. I always wanted to be a prize fighter. I used to hang around the clubs and even used to fight as a sparring partner sometimes. I wanted to become a good fighter, but I never get the chance, and my wife don't let me go there anymore. I don't get any fun out of life."

This man was a "child" with the body of an adult. His ambitions were limited, but easily satisfied; yet his mind could not accept the responsibility¹ even of a janitor's position. His wife was of normal intelligence and was constantly angry at his "dumbness." The patient was under pressure to be that which he could not be,² and at the same time was denied access to his simple ideal of "fun." The patient was not in any way vicious or sadistic; he was mentally

¹ Vide p. 220.

² Vide p. 489.

a child with childish concepts. It was the emotional disturbances surrounding this entire situation that gave rise to the psychoneurotic symptom; and the focusing of the symptom was determined by the accidental centering of his attention on the ear by the boiler explosion. In therapy, the problem was to scale down the stress¹ placed on the patient by his work and his wife and to provide some outlet for his stored up emotion.² The patient was urged in the simplest of language not to let himself get excited by the demands of the tenants; and his wife having been told of his mental level was urged to treat him as a child rather than as a responsible husband. She was also urged to make arrangements with her father, who worked in the neighboring buildings as a janitor, to teach the patient some of the more efficient ways of dealing with his work. The patient was then told that he could go to the gymnasium several times a week to watch and engage in his desired sport, and his wife was instructed to encourage him along these lines. Simultaneously, he was hypnotized and the suggestion given that the pain would disappear. The pain did disappear, and when he was seen three months later by the referring physician there had been no recurrence. The emotional basis for the pain was relieved. It is interesting to note that the site³ of the symptom in this man was determined by accident, and it is probable that if the boiler explosion had not occurred there would have been no ear difficulty but some other symptom. If he had burned his leg he might have developed a persistent neurotic pain in the leg; if a cinder had gotten in his eye, that organ would have been the center of his complaints, and so on.

Ringling, tickling, throbbing and roaring sounds may occur without organic basis. Not infrequently persons complain of hearing their pulse when the head is on the pillow, but this sensation carries over into waking hours in some patients. Many middle ear conditions may be at the basis for these abnormalities of sensation and hearing, yet they may occur without any basis other than emotional tension. It is an important question to determine whether or not emotional tension may produce tension between the small bones of the middle ear, and on the tympanic membrane sufficient to facilitate the production of these sounds. The therapy as always must be directed toward the cause.

Mrs. W. H., aged twenty-two years, was referred because of her complaint of ringing in the ears and a vague sensation of itching in the ear. Auricular and auditory examinations were negative. It is interesting to note

¹ *Vide* p. 490.

² *Vide* Ch. XII.

³ *Vide* p. 292.

how the patient focused her complaints on one system, sufficiently so that she was sent to a specialist on ear disease, and how these same complaints dwindled to an inferior position when the entire history was taken.

Four years earlier the patient had awakened out of a sound sleep to find her sister having a violent epileptic convulsion, and since then had been nervous and had developed the ear sensations. In spite of the fact that the ear sensations were the presenting complaint the physician made an inventory by systems, beginning with the head, and the patient brought out the following complaints. "My *head* feels awfully funny. I used to have pains in it. My *mind* isn't right. I feel as if I'm going crazy. My imagination gets the best of me; I'm afraid to open windows, and to be where there are knives, lest I hurt myself. I think I have every disease imaginable. My *sinuses* used to bother me a lot, but they haven't lately. My *teeth* aren't good; I think I've got pyorrhea (there was no observable evidence of this on superficial examination). My *throat* has an awful choking feeling; it's suffocating-like. My *eyes* have a drawing feeling; at times I can hardly see. My *heart* pounds so hard at times that you can see it through my dress. I get sharp pains coming and going around the heart often. I can't get my *breath* at times and once I was sure I had tuberculosis. My *stomach* isn't right, I can't eat or drink and feel nauseated. Everything lays like a lump in the pit of the stomach and hurts. My *periods* (menses) used to be seven or eight days and I had headaches, was in a daze and felt light-headed. The 'shots' (theelin) cut them down to five days now. My *legs* always feel shaky-like, as if they'll give way. I tremble all over and feel as if I could drop things. When I move my arms and legs the *bones* crack and make funny sounds. Weak feelings come over the *whole body* and it feels just like I'm passing out, but I never actually faint. It feels just like dying. I've lived a thousand deaths; am afraid and don't know of what; am afraid of dying or something."

The above statements are abstracts from the patient's history taken on the first visit when she was seen. It is indicative of the general nature of emotional expression, even though the presenting symptoms were apparently centered in the ear.

Deafness, complete or partial, is not an uncommon symptom. In general, the etiology of it may be the same as that involving disturbances of vision, a symbolic desire to avoid hearing of difficulties (in visual amblyopia it is often a desire to avoid seeing difficulties). The deafness is bilateral, inconstant, and without any demonstrable organic pathology. It generally is associated with many other neurotic symptoms,¹ and is relieved by psychotherapy.

Mrs. C. D., aged forty-three years, was referred from the department of otolaryngology for partial deafness which had no determinable organic basis. When the patient entered the consulting room, she spoke in a normal toned voice, and yet could not hear unless the examiner raised his voice

¹ *Vide* p. 97.

almost to the shouting stage. The patient told of her husband's death some three years ago, and of her struggle for existence. She had two children aged three and four and a half, and worked in a factory earning a very meager wage. She lived with her sister who was married and had a small crowded apartment. Not only was the physical standard of living very low, but there was intense dissatisfaction between the two sisters. When the patient returned home from work, the sister would begin to nag and complain. The constant whining, the fault finding, the seeming hopelessness of her position discouraged the patient to the point of brooding and frequent tears. One day while preoccupied, the patient did not hear what her sister said, and the sister caustically remarked, "You must be getting deaf." From then on the patient heard less and less in the house, though she managed to make her way about at work and away from home with no difficulty. When the examiner spoke to her, it was necessary almost to shout to be understood, but as the patient began to unfold her story more and more, it was possible to reduce the loudness of the voice to a conversational tone. However, when her story was finished, and she was being given various suggestions, it became necessary to raise the tone again.

The therapeutic situation was prognostically poor. It was suggested that the patient try to become more social and divert her attention and interests into something that she could enjoy; but she was fatigued from the day's labors, and the care of the children and their belongings took up most of her spare time. The persistent nagging made it almost impossible for the patient to get any peace and sympathy; and few results were achieved in the patient's six visits to the dispensary.

Auditory hallucinations are the most common form of hallucinations, but are not properly the result of ear difficulties or even of the neuroses. Hallucinations in general are the result of projection of one's dissociated thoughts,¹ and occur primarily in the psychoses. Illusions, or misinterpretations of actual stimuli, as occur when one hears one's name called only to discover that someone else has been called, or some unexpected sound has occurred are similarly based on the projection into the outside of one's self-consciousness (crudely expressed, it is "hearing what one thinks"). Hallucinations of sight, or sound, or smell are all based on this same mechanism, and occur primarily in the schizophrenias² and organic psychoses.

Rhinorrhea is not infrequently found in tension states; it is exceedingly difficult to prove, however, that there is no basic irritant, even if it lies only in the weather. A number of subjects complain among other psychoneurotic symptoms of a profuse secre-

¹ *Vide* p. 76.

² *Vide* p. 424.

tion from the nose particularly during the spring or fall of the year. It may very well be that these patients are particularly sensitive to some pollen or get colds which under ordinary circumstances would have no effect, but which in these emotionally over-reacting persons, will produce an excessive secretion.

Complaint of a fish bone in the throat is not infrequently heard in the E.N.T. office, and yet the most thorough investigation may reveal no fish bone, or any semblance thereof. It is possible for a small bone to lodge in the throat, and be difficult to locate in spite of the most careful examination, and *x-ray* studies; yet the reverse also occurs: patients complain of such an occurrence with no physical basis therefor. In these instances, as is the case with many other neurotic symptoms, the complaint serves as the focusing point through which their emotional tone created by other problems can be discharged. Patients find it very difficult to give up such a complaint, particularly if their problems continue unabated in intensity.¹

Mrs. F. Y., aged forty-nine years, was eating a fish dinner, when she suddenly complained of pain in her throat, as if a bone had stuck there. She tried to "brush" it down by eating several leaves of lettuce, and then followed one suggestion of her family after another in an effort to dislodge the bone which she was sure was stuck in her throat. The family physician was called, but since he could not see anything in the throat, advised a specialist's examination. The specialist found no indication in the throat of any bone, or scratch, or irritation. The patient wandered from doctor to doctor, and from dispensary to dispensary making the same complaint and undergoing innumerable investigations. She was referred to the department of psychiatry two years after the onset of her symptoms, which had remained unchanged.

The patient had been married thirty-two years, had three married children, and lived with her husband in a small apartment. Her husband worked at odd hours in a tailor shop and in the evening played cards with his cronies. Toward his wife, he was cross, irritable, and unsympathetic. She awoke in the morning to make him breakfast, but did not see him during the rest of the day. She wandered from one friend to another but she had neither the money nor the educational background to seek out more interesting amusements. She was not intellectual enough to be bored; so she was just plain unhappy. For a number of years she had given voice to her emotional discord by visiting clinics for various hypochondriacal aches and pains. Her children were kind to her, but had their own affairs which concerned them, and she went to their homes only occasionally for meals. It was on just such an occasion that she had received some painful stimulus which she interpreted as a fish bone. She was kept quite busy and occupied

¹ *Vide* p. 218.

going to various clinics and discussing the various tests she was undergoing and whom she was seeing.

This patient's complaint was not set in any serious and deeply repressed unconscious wishes. She had always been more or less unstable; and as her children grew older, and her required work dwindled, she found time hanging heavily on her hands. If her husband had been interesting and conversational, and sympathetic, all might have gone well; but since he was as he was, the patient brooded over the inadequacies of the present life, the deprivations of the past life, and the probable suffering of the future. The "bone in the throat" was a welcome relief from all this monotony, and at the same time a vicarious release mechanism for her emotional brooding. It was a relatively easy matter to interest this patient in a welfare society, where she spent much of her time caring for children who were in actual misery. Not only did her distress over the imaginary fish bone disappear, but the other neurotic symptoms which were present, but in the background, also disappeared.

Aphonia.—Aphonia¹ is another distressing symptom which is often called to the attention of the laryngologist. The onset of these symptoms is usually sudden, following a "sore throat," or as in the case of one young woman following the "scare" of an automobile accident. The aphonic patient can usually whisper and so is able to make his wants known, but otherwise he cannot sing, shout, or call in a loud voice. On laryngoscopic examination the vocal cords are found to be normal.

Mr. K. L., aged twenty-six years, was referred to the psychiatric dispensary because of hysterical aphonia. He spoke in a whisper and complained bitterly of his lot.

The patient lived with his father behind a small store where his father sold groceries. The father was a penurious person and complained constantly about the difficult way life had treated him. His wife had died many years before, and he had two children, the older of whom, a daughter, had married. This daughter had seemingly forgotten completely about her father, and he constantly bemoaned the fact that his children did not care for him. He was resolved that his son should aid him and imposed the most menial tasks without compensation. The son was forced to work early and late, and after he had completed the second year of high school, was kept home for this purpose. He had always had ambitions of becoming an educated and professional man; and not only were his opportunities thwarted, but he was stunted in every other way by his constant association with his nagging, complaining, irritating father. Several times he had run away, but lack of funds and failure to procure a position had forced him to return; and after each return, his life was made more unbearable by his father. One day, after a great deal of abuse the patient called his father obscene names and fled the home, only to return late at night. He was received in cold silence, and life continued as it had, until late the following night, when the father of the

¹ *Vide p. 34.*

patient developed an apoplectic stroke with left sided hemiparesis. The father had been ill for some time and had visited clinics for his "high blood pressure," but he accused his son of producing this ailment and the son believed he had brought on the stroke. He had nothing to say, and developed his aphonia immediately thereafter. The inability to speak was the result not only of the emotional shock at finding his father thus paralyzed, but of his guilty feelings and on the basis of his life-long emotional instability. The father died shortly thereafter and the boy lived on relief, handicapped all the more in his seeking work by his speech ailment. He had tried several voice trainers, and speech experts who focused all their efforts on trying to have the patient make certain sounds. The fallacy of treating just the symptom was not understood and the patient's aphonia remained.

The principle of therapy was to remove as much as possible this man's guilt feeling,¹ to have him cultivate his ambition in a practical fashion, and develop outlets for his energies. In the ensuing discussions the patient was made to view his relationship with his father in an objective fashion, and to understand how abusive language might come from anyone under stress; to realize that his father's hypertension was the responsible cause of his stroke; to believe that if he devoted himself he could finish his high school education and take college work sufficient to become a laboratory technician; and he was persuaded that he had to seek some day work by which he could support himself as an independent adult. Hypnosis² was a valuable aid in obtaining relief from the aphonic state, and the fulfilment of the above conditions maintained his improvement. When he was seen three years later he was working as an orderly in a large hospital, had married an attendant on the ward, and though he had given up all idea of taking college work, he was interested in his work, content, and without any sign of neurosis.

OBSTETRICS AND GYNECOLOGY³

The reproductive tract of the female is very susceptible to the influence of emotional changes. Menstruation and pregnancy are frequently involved. The menstrual cycle may be delayed or precipitated, it may become irregular, it may be associated with severe cramps, or with an excessive feeling of irritability. The uterus is plentifully supplied by sympathetic and parasympathetic nerves, but the nervous influence on the uterus may also come from the emotional excitation which directly or indirectly undoubtedly influences the hypothalamus.

¹ *Vide* p. 182.

² *Vide* p. 230.

³ *Vide* p. 95 *ff.*

Menstrual delay may occur in many instances and under widely varying circumstances. It is not infrequently found in unmarried women who fear conception, or in married women who also do not wish (or for that matter strongly wish) pregnancy.¹ Emotional tension does not particularly accommodate these patients; it exerts its usual inhibiting effect on the menstrual cycle. On the other hand, if there had been prolonged inhibition and emotional tension, the menses may become first irregularly delayed and after a while, quite profuse and frequent. Deficiencies of the glands of internal secretion play a vital role, and often produce therapeutic effects when supplied; but the intercorrelation between emotional tension and endocrine secretion is such as to make the separation of the two extremely difficult. It is important to check every possible factor when treating these conditions. Delayed onset of menses in the adolescent girl may be more closely associated with ovarian dysfunction than with a psychobiologic unrest resulting from puberty; but an unhealthful atmosphere in the home, may, from the psychologic point of view, play an important role. Similarly in middle age, the early signs of menopause may be the essential element in menstrual dysfunction, but the emotional element should not be overlooked. In other words, disturbances in menstruation should be thoroughly studied from all possible aspects; but not the least of these should be the sociopsychologic aspects.

Fear of pregnancy is commonly associated with menstrual delay. Usually, the patient sees the physician within two days after the expected period has passed without the onset of menses; but delays may occur for several weeks or months. Not infrequently the patient gives a history of irregular menstruation, but it is not uncommon for the interruption to occur in a setting of regularity. The treatment is two-fold: one to determine whether the patient is pregnant or not, a difficult task inasmuch as the Aschheim-Zondek pregnancy tests are usually not positive for several weeks in pregnant cases; and secondly to reassure the patient emotionally. The practical situation may be such as to make the advent of a child a difficult strain; the financial status of the family may be inadequate to support the existing children let alone a new addition; the physical condition may be such as to make it inadvisable to bear another child. As physicians, we must face the actual situation with its attendant complications. The physician must

¹ *Vide* p. 112.

determine for himself what advice he will give; yet he must do what he can to give the patient courage and reassurance to face the outcome with as few fears or tears as possible. The release of emotional tension will permit the uterus to operate in its normal fashion and in the absence of pregnancy the flow will soon return. It is reassurance plus the increased morale on the part of the patient which releases this tension; and time itself is cooperative. Many abortions done behind locked doors are simply the scraping of normal uteri, wherein the menstrual flow was emotionally inhibited.

Miss A. B., aged twenty-three years, was in an intense state of apprehension. She had not slept for several nights, could not eat, and at the office could not concentrate on her work. She burst into tears at the slightest provocation. She was engaged to be married, but the ceremony was not to be performed for six months by which time the combined earnings would be sufficient to purchase furniture and outfit their home. They had been engaged for three years, and the necessity of supporting their respective families had limited their ability to save for their home, and even to support themselves, adequately. Three weeks earlier, sex relations had occurred; and ever since, the patient had been certain that she had become pregnant. Her guilt feelings were so great that she had not dared to mention her fears even at confession. Her period had been expected two weeks ago, and when it did not come she was certain of pregnancy and began to dwell on all the "horrible" complications; all the symptoms of an intense anxiety state came to the fore.

It was necessary to reassure the patient; to show her that she had overemphasized the difficulties of the situation and was foreseeing possibilities which were unlikely, and, moreover, that she was overly sensitive to what others might think of her. If she were pregnant, it was pointed out, she could have a quiet wedding and continue to live as she had until she and her husband were ready to live together. The situation was not the happiest one, it was true; but on the other hand, it was not the calamitous one she had imagined. The first thing to do was to have a pregnancy test. She was to bring a sample of urine to the laboratory the next morning. In the meantime she was to take phenobarbital every three hours and whenever she felt "nervous,"¹ the purpose of the medicine being to quiet her and reduce her tension. She was urged consciously to do what she could to avoid thinking of the subject,² and to enter into as many diverting activities as she could.³ She was reassured that since her intended husband had used a contraceptive, she probably had no real pregnancy. Two days later the patient phoned to say that the menses had begun.

¹ *Vide* p. 236 ff.

² *Vide* p. 196 ff.

³ *Vide* p. 253 ff.

This experience is an extremely common one; and whereas one can do little as far as changing the actual situation if pregnancy occurs, one can do much so to change the patient's attitude that the situation can be handled with less perturbation and with more intelligent planning.

The reverse situation is also frequently found; *i. e.*, the patient desires a child and may be so affected by her desire that menstrual delay will occur. These persons do not need psychotherapy as much as a capable obstetrician, and time and effort often do what medication cannot do.

In many instances the menstrual period will come on earlier than usual, and may be prolonged. In some patients the period will last from ten to fourteen days, and occur with only a week's intermission. Rarely can any definite pathology be proved, though usually the diagnosis is made of an endocrine dysfunction. Clinically, many of these patients are in an intense emotional state, and have so been for some time.

It is difficult to state, *post hoc*, *proper hoc*, but it appears that the menstrual difficulty manifests itself in a setting of chronic anxiety attacks. In many patients the physician can discover the existence of a fibroid uterus, or ovarian pathology, or actual glandular deficiencies; yet in a large number no such organic basis can be found. Moreover, in the course of psychotherapy, there is a spontaneous readjustment of many of these chronic uterine difficulties. Patients who come in with psychoneurotic complaints mention in the course of their discussion their chronic difficulty with menses, and while the menstrual complaint is not the primary one, there is frequently a spontaneous readjustment of it as the patient recovers. In these instances little is done in the way of direct treatment of the uterus or ovaries, nor is there any suggestion given or discussion of this problem other than the preliminary one. The improvement occurs simultaneously with the improvement of the neurosis.¹ In these situations, as in most others, the point of attack does not lie in the uterus but in the emotional tension.

Miss K. L., aged nineteen years, complained of excessive irritability, crying spells, a sleep troubled constantly by dreams, and marked palpitation. Her general physical history revealed a tendency to chronic constipation, and menstrual irregularity. For several months she had periods lasting twelve to fourteen days, and it seemed to her that hardly had she ceased to flow than she began again. There was a constant feeling of tiredness, and her blood count was just under four million.

¹ *Vide p. 295.*

She lived in a very unhealthy environment. Her mother was emotionally unstable and suffered frequently from all sorts of aches and pains. The mother used the patient as an outlet for her own unhappy existence. She nagged and scolded and criticized everything the patient did. The economic situation was in itself depressing, and the patient compared herself and her "unhappy plight" with that of other girls of her acquaintance. Her father was a sullen person, driven into verbal retirement before the constant onslaught of his wife's fault-finding; he gave no comfort to his children. The patient had wished to have a career, possibly in law; but the demands of the mother and family were such that she could not go beyond a two year high school course. She was taking courses in night school, and had avoided the company of her own or the opposite sex. She was extremely unhappy, her ambitious thwartings adding to the nagging and irritations which occurred at the home.

It was these factors which were at the basis for her psychoneurotic complaints and her menstrual difficulty. The excessive loss of blood resulted in her anemia; and her poor habits of health, of eating and sleeping, her lack of physical and mental recreation all were important contributory factors. The therapy was directed toward getting the patient to live a more normal life, which included more time for physical recreation, more time for social recreation, more attention to her personal appearance so that she would receive more invitations and social attention, a regulation of her diet and sleeping hours: in short an entire revamping of her mode of existence. Secondly, the patient was taught how to adjust to the irritating situation at home. She was taught not to be irritated by her nagging mother, to regard her mother sympathetically in the light of her mode of living, and of all the normal satisfactions which any woman would have wished and which her mother had not had. She was trained to listen to her mother "with the mind and not the heart" so that she could evaluate intellectually what was said and follow what she considered right, without permitting herself to be aroused emotionally.¹ It took fourteen visits to inculcate sufficient of these principles so that she could "carry on" on her own; and when she was seen three months later, she was as her brother remarked "a different person." Her menstrual periods at that time lasted five days and were normal in every respect.

Menstrual cramps, low back pains at menses, hyperirritability, and attacks of depression are common accompaniments of the menses. In most women, these symptoms when they are present, come on one or two days before the onset of menses, and disappear after several days of menses. However, there are extreme indi-

¹ *Vide* p. 203 ff.

vidual variations so that some patients have such symptoms almost a week or ten days before and do not get any relief until several days after menstruation has ceased. Some patients are worse during the menses, though as a rule the intensification of symptoms lasts only during the first day or two of heavy flow. Again, some patients suffer slightly at the period of ovulation, but this condition is more uncommon than common.

In many instances these symptoms result from pelvic pathology, or from endocrine dysfunction. Indeed the dysfunction which produces these symptoms may on occasion give rise to an actual "menstrual psychosis," in which the psychotic personality is more or less latent, but sufficiently precarious that it can be thrown into a manifest psychosis by the menstrual period.

Miss K. V., aged twenty-five years, was diagnosed as having a schizophrenic psychosis. However, the illness had begun first to evidence itself at about sixteen and had continued since then with exacerbations and remissions. These exacerbations occurred during the menstrual period, and lasted from ten to fifteen days. During this time, she was frightened, irritable, and had many fearful hallucinations. Men were trying to attack her, and she was annoyed by electrical vibrations, etc. In between her menses, these symptoms subsided so that she was relatively normal, though she still retained a quiet, withdrawn attitude which is commonly found in catatonic patients. In this case, the menses in themselves were the precipitating factor; and the nervous system was so unstable that the change in endocrine activity upset her.

The reverse situation, however, is also true; intense emotional activity can disturb the menstrual function, as indicated by the cases cited above. Moreover, mild physiologic sensations which ordinarily pass unnoticed may be seized upon and over-emphasized by the psychoneurotic patient. Stated in another way, the threshold to pain and irritability has been lowered so that slight disturbances are more keenly felt. This lowered threshold is generally part of a total irritability, and tends to occur in persons who are suffering from a general state of tension. Some patients may be able to wear a mask over their feelings during the month and give up their restraints over the menstrual pain which is so common as to be considered justifiable and expressible. During menses, just before and just after, there is in most normal women usually an increase in sex desire;¹ and where sex maladjustment is present, the sexual associations may be a prominent factor in the production of emotional symptoms, and hence in the production of increased irritability, etc.

¹ *Vide* p. 104.

In the therapy of these menstrual symptoms there are four procedures which are most effective when used in conjunction, although the emphasis may be placed on any one or group of these procedures. Thus the first step should be to *deal with the physical substrata*,¹ whether it be pelvic pathology or insufficient endocrine secretion. This technique, for example the widespread use of theelin or progestin, has often been overdone, since any disorder involving irritability, insomnia, etc., occurring during the fifth decade in women is often assumed to be the result of an early menopause. (2) The *disturbing emotional elements* which are existent *should be analyzed, and psychotherapy instituted* as necessary;² indeed, emotional difficulty is often the major difficulty in that it is usually a primal cause in the menstrual distress and in that it requires much time and effort to treat. (3) The person's *threshold to pain must be raised*³ so that what cramps there are can be borne with greater equanimity and less awareness. Continuation of physical activity and of any other activity will serve to keep the attention focused on something else. The patient must consciously make the effort to think of other things, and let her attention wander as little as possible to her uterine peristalsis. It will be found that most women can become more resistant to pain sensations, provided their underlying emotional pathology is corrected. In nursing schools, for example, a general discussion of the pain mechanism with an emphasis on the ability to control it and to overcome the associated irritability is followed by a definite decrease in the number of nurses who become ill and go to bed once a month. (4) However, the cramps are often very severe, and it is well to alleviate them, using medication in gradually decreasing doses,⁴ so that point number three can be carried out. A very effective compound is codeine sulphate grain $\frac{1}{4}$ and acidiacetylsalicylici 5 grains in capsule form, one to be taken every three hours as necessary. Generally two or three will enable the patient who formerly had to spend the first day or two in bed, to continue with her work; and in subsequent doses the amount of codeine is gradually reduced.

This general outline must of course be modified to fit each individual case, and there will be considerable variation in the amount of emphasis placed on the various methods used; nevertheless, the most successful therapy will concern itself with the emotional background as well as with pathophysiologic backgrounds.

¹ Vide p. 124.² Vide Ch. VI.³ Vide p. 225.⁴ Vide p. 236 ff.

Vaginal cramps, pains and "drawing sensations" are very commonly the result of emotional difficulties which are of a sexual nature.¹ On occasion one may find some irritating lesion or excretion, yet even in many of these conditions the sensation is out of all proportion to the physical basis. In many women, "drawing sensations" occur before or after intercourse; and in the extremely mal-adjusted persons, these sensations may come on when there is merely the thought of intercourse. The actual sensations are the result of contractions of the pelvic musculature as well as of vaginal irritation and paresthesias of "central" origin. These contractions and irritations are stimulated by intercourse and yet are also the result of the person's desire. If this desire becomes strong enough, it may play the important role in an actual psychosis.

Miss G. N., aged fifty years, had various abdominal complaints for which she was attended by the family physician. One day she called her brother and told him that she was in love with her physician and he with her, and that they would soon be married. In haste the brother called the physician, only to find that he knew nothing of the situation. The patient admitted that he had given no cause for her statement other than that he smiled "knowingly" when she was in the room with him and that when he came near her he exerted some sort of force "like mental telepathy" which caused her to have a drawing sensation in her vagina. Thereafter, whenever a man came near her, she experienced this sensation and elaborated on it either by rejection of the sensation and accusation that the particular man was after her, or by acceptance of the sensation as evidence that the man wished to marry her.

This woman, a single, chronically neurotic person, had been reared by a strong and domineering father whom she feared and yet whose attention she desired more than anything else. Her personality was such that she did not have any proposals except one, and the suitor in that case suddenly disappeared before the marriage. She envied all her married friends, and resented keenly the slurs on "old maids." In this setting the above symptoms developed, and the drawing sensation in the vagina was a real as well as symbolic expression of her desires. The therapy was two-fold: one, chemotherapy in the form of metrazol; and two, psychotherapy to reorient her attitudes toward "old maids" and to adjust her to a marriageless life.

Vomiting during pregnancy² may have its origin in various mechanisms not the least of which is the psychologic status. To most women, pregnancy is an exceedingly important experience not only in itself, but because of the increased attention which is expected and obtained. Moreover, neurotic as well as non-neurotic women become pregnant, and the emotionality where existent is continued into and exaggerated during pregnancy. As a consequence there is finnickiness about food, the desire to have certain

¹ *Vide* p. 96.

² *Vide* p. 96.

attentions, vomiting at the slightest provocation, etc. This last mentioned may be aided also by the fact that there is some physiologic disturbance early in pregnancy to which the body has not become accustomed. Yet one not infrequently finds women with vomiting of pregnancy who believe they are pregnant but have not even missed the first menstrual period. The treatment of these conditions lies in the calm statement of the problem to the patient so that she understands the mechanism involved and the role of the emotions. Then the most disturbing problems are discussed and the patient is urged to handle them objectively and philosophically wherever possible. Finally, particularly if hypnosis is used in conjunction with the above treatment, most patients will lose their symptoms.

OTHER PSYCHOSOMATIC SYMPTOMS

Insomnia.—Insomnia is one of the most difficult of symptoms to treat, for the problem which confronts the physician is not only the inability to sleep but also the restless, dreaming sleep from which one awakens tired. The actual mechanism of sleep is unknown, though there are many theories thereon. The disturbance of sleep, however, commonly falls into five etiologic categories: toxic states, inadequate habit training, overstimulation, neurosis, and depression.

Toxic states are frequently found after operations, in acute and chronic illnesses, and in drug poisoning. In these conditions, if the toxin is stimulating and irritating, sleeplessness will be produced; if the toxicity has gone beyond the irritative stage into the depressive stage there may be oversleep and comatose states. The therapy of these causative conditions is essential in order to produce sleep. While the toxic state continues, it is inadvisable to use drugs such as bromides, which in themselves may become toxic factors. Indeed the least objectional of all drugs during the toxic state is morphine without the hyoscine, for it has a valuable function in quieting fears and emotions as well as a hypnotic function; and the toxic state in general precludes the liability toward habit formation.

The *habit element*¹ is an important one in bringing on sleep. If one follows the same procedure and retires each night at the same time, sleep will tend to come on automatically. The more routinized one becomes in this matter, the more surely will sleep come on. The organism is given to automaticity; and one can

¹ *Vide pp. 48; 381.*

make sleep come on just as one can train peristalsis of the intestine to come on at given intervals. In general, persons who are sleepless for long periods of time would do well to cultivate such a habit in addition to the other measures used. One frequently finds in many such patients a marked irregularity in retiring and, while many persons fall asleep quickly and well without the aid of regularity, one should use this as a help for therapeutic purposes.

Overstimulation, excitement, or an unsolved problem, particularly of a personal nature, may serve to keep the patient awake. The overstimulation may come about as the result of too much activity (a common cause of sleeplessness in children), of an intensely interesting play or discussion, or experience, or even from drugs, as caffeine. This central stimulation is sufficient to keep sleep from coming, particularly in tense, alert, or sensitive persons. These "stimulants" need to be removed, for they are the stress which precipitate the sleeplessness. It must be remembered, however, that if a person can lose sleep over such stimulations, it is an indication that he is basically at a high level of irritability; and an examination of his reactions in waking life will show many indications of this fact. As a consequence, the *treatment of insomnia* resulting from apparent overstimulation *is not only the removal of this stress but also the reorganization of the daily life and attitudes.*

The normal person not infrequently has a night in which he cannot sleep, because of some such overstimulation. Every one has on occasion some worry, concern, or disturbance over a personal problem which will keep him awake. Such occasions are more frequent in some and less in others, and the average person has several sleepless nights a year. This experience falls within the normal range, and thus does not call for any special therapy, other than the use of a sedative should sleep not come after an hour or two in bed.

A chronic tendency toward sleeplessness, particularly if it lasts for many years (in contradistinction to the chronic insomnia of many months found in a manic-depressive depression) is usually the result of a *psychoneurotic state*, the most common variety of which is chronic tension.¹ In persons with this difficulty, the primary basis for the insomnia is conflict and emotional unrest over some difficult situation. The treatment of this insomnia to be permanently effective must be directed toward the cause. Medication, itself, will generally fail, and large doses result in a drugged sleep with "hangovers." When these persons go to bed they cannot sleep because they are extremely tense and carry with them

¹ Vide p. 30.

the preoccupation of the day; and even when they deny "consciously" thinking of their conflict, the very existence of the unsolved emotional situation, indicates that they "unconsciously" are concerned over it.

These patients go to bed and toss for hours before they manage to get to sleep; and when sleep does come, it is interrupted by frequent waking moments, by fearful dreams, by a feeling of fatigue on awakening. It is difficult for them to get out of bed in the morning, and they are tired most of the day. This state of affairs exists with medication also, except that sleep is brought on more quickly; but this does not result in an amelioration of the restlessness, the disturbing dreams, the subsequent feeling of fatigue; and there is often additional sleepiness and sluggishness as a result of the drug.

There are many degrees, however, of psychoneurotic tension, and many degrees of sleep disturbance. In the milder forms, one may simply find it difficult to fall asleep because of anxiety over some transient problem; in such a case a quick acting sedative is often efficacious. In the more extreme forms, very little in the way of symptomatic therapy is helpful, and a state of chronic exhaustion results. Insomnia is merely a symptom—an annoying, fatigue-producing symptom—yet merely the result of other causes. Above all, the patient should understand that lack of sleep does not mean that insanity will occur or that he will be excessively weakened. To treat it in itself is to fail to recognize the need of the organism to be rid of the cause; and indeed on closer examination, one may often find that insomnia rarely exists in pure form; that there are many associated symptoms of the underlying cause.

Another major cause of insomnia is the *manic-depressive depression*. These depressions occur far more commonly than is generally recognized.¹ The insomnia of these patients is particularly intractable. Frequently, these patients can fall asleep quickly, but they then awaken at two or three in the morning and are unable to go to sleep again. Moreover, these patients tend to awaken with their jaws clenched and their fists tight, indications that even during sleep they were not relaxed. It is this *muscular tension which exists during sleep* which is in a large measure responsible for their tiredness on awakening. However, these patients often have several days of inability to go to sleep; and even with medication the sleep is a restless, tossing, irritable, nightmarish one. Various methods may be used; often a drug is successful for a while only to fail after a short period of use. Here again the maxim of treating

¹ *Vide* p. 399.

the cause comes to the fore. As the depression spontaneously lifts, the sleep tends to become normal, indicating in another way that the insomnia is only a symptom. When these patients are treated with metrazol shock therapy, the depression and the sleep both improve together, and it is interesting to witness a protracted insomnia clear up after two or three shock treatments.

Hence the first principle of treatment of the insomnia which results from tension, from psychoneurotic phenomena is the treatment of the tension itself. This necessity is seen, for example, in the case of Mrs. O. N.,¹ whose concern over her alcoholic son, prevented the most powerful of sedatives from acting. From practical experience, one finds that long term ability to sleep (temporarily many drugs are very efficacious in producing a restful sleep, but they generally fail when the person returns to his normal environment and problems) is brought about in proportion to the ability with which one is able to remove the psychological tension.

One of the most valued adjuncts in producing sleep is hypnosis.² In hospitals it is far easier to use this method than it is on patients in their home, because of the limitations of the physician's time. Yet when it can be done sleep through hypnosis has advantages which far outweigh those of drug-induced sleep, for hypnosis functions not by physically toxifying the brain centers, to produce unconsciousness, but by relieving the psychologic tension which initially is at the bottom of the symptom. However, even in this situation, the hypnotic effect is temporary unless one removes the cause of insomnia.

Miss L. R. had suffered from chronic insomnia for many years. She would not go to sleep until late at night and then would toss about for many hours. She averaged two to three hours sleep a night; and although she worked every day, she fainted frequently. She went on "on her nerve."

When first seen, she was given pentobarbital grains $1\frac{1}{2}$ and told to take it every one-half hour until asleep. She took 7 capsules and slept for three hours. Several nights later, she was given some "white pills" which consisted of $\frac{1}{4}$ grain morphine sulphate, and told to take one pill every fifteen minutes until asleep. She took 3 grains of morphine and slept three and a half hours. Finally, in desperation, $7\frac{1}{2}$ grains of sodium amytal was given intravenously, and the patient went right to sleep but slept only three hours. Medication seemed to be of little avail in the treatment of her insomnia.

An effort was then made to hypnotize her. She succumbed quickly and went into the third stage. Under hypnosis, she was told not only that she would sleep long, but that her basic difficulties would be faced in another manner, and that she would no longer be tense over her particular problem. That night she slept nine and one-half hours without awakening.

¹ *Vide p. 237.*

² *Vide p. 230 ff.*

The tremendous resistance that this patient had to the various drugs testifies not to their impotence, but to the potency of her emotional disturbance. Conversely, the effect of hypnosis, which was repeated frequently, testified to the emotional nature of her insomnia.

Further therapy may be in the nature of providing diverting interests just before retiring. Reading, for example, often puts one's trend of thoughts away from the self, and is succeeded by sleep. Even exciting and stimulating activities may be of value if, rather than keeping the patient awake, they provide sufficient relief from his own thoughts to be actually sedative instead of stimulating. Moreover, the alleviation of the neurosis itself requires the expenditure of effort in several non-personal directions.

Medically there are several approaches to the production of sleep. The most commonly used principle is that of depressing cortical activity by some sleep producing drug. The purpose of these drugs is to quiet cortical activity (*i. e.*, in the ordinary case of insomnia) when the activity is the result of excessive psychologic stimulation. It is unfortunate that medical science has not as yet developed more efficient ways of diminishing cortical activity than by the use of depressing drugs. Nevertheless, many of the drugs used are invaluable in the absence of better methods. As a rule the quicker acting drugs which tend to wear off are better than those with prolonged action, for the hang-over effect should be avoided where possible. Generally speaking, in the neuroses, the difficulty lies in going to sleep; in contrast to the depression in which patients fall asleep quickly but awaken early in the morning and stay awake; and once sleep is produced it will continue on its own power. Sleep may also be "wooded" by decreasing cerebral circulation; by hot drinks or warm baths or massage before bed time, which have the effect of drawing the blood to the splanchnic area and to the periphery, away from the brain. A cold wet pack often accomplishes the same purpose by making use of the body's compensatory tendency. The patient is loosely wrapped in a bed sheet which has been wrung out in water about 60 to 70 degrees. This pack is distinctly chilly at first, but soon there develops a compensatory peripheral vasodilatation which permits the patient to drop off to sleep. Similarly it is easier, as a rule, to sleep under warm covers in a cold room; and, conversely, overheated rooms on very hot days are generally detrimental to sleep because the escape of heat from the organism is not so efficiently carried out.

Headaches.—Headaches¹ are one of the commonest of psychoneurotic symptoms. Here again, as in most psychoneurotic phenomena there is probably some vasomotor change; *e. g.*, in the meninges, which is at the basis of the symptom. There are several types of headaches which are common. *Pressure on top of the head* is probably the most frequently described one. The patient feels as if there were a weight pushing down on his head, rather than a true ache. A second type of headache is *over the occipital region*; this headache probably is associated with tension of the trapezius and other muscles which insert on the skull in this region and the muscle tension is great enough to create an ache. The above two types are most common, but there are many other varieties. The patient may complain of his head "being too full" or of a tight band about his head, of burning areas over localized "spots" which may be described "as big as a dollar" and the like, of pain over the eyes which the patient often spontaneously insists is the result of eye trouble, but which has no relation to eye fatigue. Frequently the site of headache shifts all over the head. The headache may be so intense as to cause the patient to stay in bed for days at a time or to submit himself to all sorts of harrowing procedures. The intensity is dependent upon two factors, the intensity of the underlying emotional difficulty, and the amount of "vasomotor" (it may be some other physiologic mechanism) resonance.

The treatment must be directed toward the cause. One cannot say enough about studying the physical constitution first. The case of the boy² who was said to have a psychoneurotic headache and finally turned out to have sinuses full of pus, is very much to the point. Yet when once it has been established that there is no organic etiology, as we think of disease today, then the psychotherapeutic procedure should always be employed. In such instances, in addition to relieving the emotional stress, it is important that the patient continue with his daily activities as much as is possible despite the pain in the head. Mrs. F. S. for example,³ found that her intolerable headaches were greatly relieved not only by changed attitudes but also by forcing herself into social activity despite the feeling that she could not leave the house because of the intensity of the ache. In many instances, persistent intractable headaches are found in efficient, but driving and tense persons; and the therapy is directed toward relaxing these basic drives.

Time and persistence are important elements in therapy.

¹ *Vide* p. 96.

² *Vide* p. 180.

³ *Vide* p. 169.

CHAPTER XV

THE PSYCHOSES

THE psychoses differ from the neuroses;¹ but the distinction between the two is neither definite nor clear. Some men have termed the psychoses major, and the neuroses minor psychoses; but such verbal differentiations do not aid in an understanding of the illnesses. H. Douglas Singer believes that the neuroses are the result of psychogenic disturbances; whereas the psychoses have their origin in a physiologic disturbance, the pathology in schizophrenia² and manic-depressive psychoses³ existing in the central autonomic system. Clinically, the psychotic patient tends to act or talk "queerly" while the psychoneurotic patient tends to appear as an average person who has some physical or emotional ailment. The phrase "tends to" is used advisedly, for in actual practice the distinction is often difficult to make. In a psychosis, the person's attitude toward reality is changed: the manic-depressive viewing all incidents either as hopeless or joyously probable; the schizophrenic withdrawing into phantasy, or projecting his thoughts so that they appear to be realities; and the psychoneurotic on the other hand reacting to life as do others in his community but in an overly tense or symbolic fashion. The psychotic patient as a rule must eventually be committed to an institution because he cannot get along in society; but the psychoneurotic patient rarely has to be. Because of the lack of clarity in distinction between these two groups, it is far better to speak in terms of the actual disease reaction patterns such as schizophrenia, senile dementia, or hysteria, than in terms of psychosis or neurosis.

The underlying personality plays an important role in medical as well as psychiatric disorders. When a person develops an illness, his reaction to that illness involves not only the particular part involved but also the entire personality in proportion to the extent to which it is influenced. Thus a patient with a chronic and painful condition such as gout will tend to be irritable and have explosive outbursts, while his perhaps more intense suffering from a fracture of the wrist may in no way influence his reaction. Persistent stimulation of the cerebral centers by painful impulses will, however, sooner or later disturb the patient's personality. The same is true

¹ *Vide* p. 25.

² *Vide* p. 421.

³ *Vide* p. 398.

in peptic ulcer, hypertension, spastic colitis, cardiac disturbances, persistent headaches, muscular or neuritic pains, etc.: all of which may in themselves result from emotional turmoil. Regardless of their etiology, these symptom complexes tend to disturb the personality reaction, and thus create a vicious cycle.

Not only does one person react in various ways to various pains; but also different persons react to the same disturbance with different patterns of behavior. Some will become irritable, some will cry and complain, some will be stoically silent and depressed, while others may become philosophical and tolerant.¹ The type of response which comes to the fore under stress depends largely upon the type of personality which existed before the illness. The type of personality in turn depends, as we have seen in earlier chapters, upon the type of heredity,² the type of constitution,³ the molding forces of the environment,⁴ and so on. These personality factors are modified by the degree of cortical control which we are able to learn in our social and private lives. Indeed our entire social structure is dependent upon the ability of man (by means of the cortex) to modify his basic drives and desires so that he can exist in the company of others.

In the psychoses, these basic personality features come to the fore far more strikingly than in the usual medical ailments. In some persons these basic personality features appear spontaneously and without apparent cause: in those persons in whom there is primarily an instability of mood, the psychosis will be of the manic-depressive variety; in those in whom there is a marked inclination toward phantasy formation⁵ and inhibition formation,⁶ the psychosis will be of the schizophrenic variety. If there are sufficient balancing features, a neurosis may result. When the psychosis springs *sui generis*, without demonstrable pathology, the physician may be sure that prior to the onset of symptoms, the basic personality has been extremely susceptible.

If there is a disease such as general paresis⁷ which involves the cortex, the control over the basic personality traits will then be diminished if not lost; or the control may be so disturbed as to create excessive and ambivalent⁸ actions. Such a disease process would thus show symptoms both of the disease (in this instance of syphilis) and also of the released⁹ underlying personality. It is important to keep this phenomenon in mind when one is confronted

¹ *Vide* p. 223.

⁴ *Vide* p. 51.

⁷ *Vide* p. 362.

² *Vide* p. 265.

⁵ *Vide* p. 78.

⁸ *Vide* p. 80.

³ *Vide* p. 185.

⁶ *Vide* p. 82.

⁹ *Vide* p. 361.

with a schizophrenic psychosis, for the precipitating factor may be some organic illness of the cerebral cortex, and when this illness is removed, as it can be in general paresis, the psychosis will disappear.

To distinguish between the two forms of psychosis, the term "organic psychoses" is used to refer to personality disturbances resulting from organic changes in the cerebral cortex, and "constitutional psychoses" to refer to those without apparent organic bases, even though the symptoms of both of these groups may in many ways be identical. The functional psychoses include the manic-depressive variety,¹ and the schizophrenic reactions.²

The following outline is an example of the form commonly used to obtain information about the patient who is psychotic. Much of the material must be obtained from sources other than the patient.

TOPICS FOR A DETAILED PSYCHIATRIC STUDY

Information about the psychiatric state of the patient may be obtained from the patient himself and from other informants. The more information a physician can obtain the more closely can he truly evaluate the situation, and the better position will he be in to help the patient. Not infrequently does the physician hear the story of a cruel and unjust wife or husband—a story which if accepted at face value would make of the accused a monster of inhumanity and of the raconteur a pitiable victim. More often than not when the other side of the story is told it becomes apparent that the fault is not all "one-sided," that the "victim" is equally—and sometimes even more—responsible for the unhappy condition. The physician does well to reserve judgment until he has "gotten in all the evidence."

Information from Relatives and Friends

It is desirable, within the limits of the physician's time and of the opportunities which the particular case offers, to interview several informants. Relatives and friends can often give illuminating information—facts of which the patient may not be cognizant, or of the importance and relevancy of which he may not be aware. The physician must, if he is not to be lost in a welter of time-consuming irrelevant details of what the informant "feels" about the person under discussion, be able both to evaluate the reliability and the pertinence of the information given and to guide the conversation along profitable lines. Too often the informant is so biased that his primary concern is either to condemn or exculpate the patient and he offers judgments or opinions, when what the physician needs is facts. For example, Mr. and Mrs. H. were having marital difficulties. According to Mr. H's mother, "It was all his wife's fault. Her boy had been a perfect son; had never had any difficulties with anyone, 'until that woman came

¹ *Vide* p. 398 ff.

² *Vide* p. 421 ff.

along.'" Mrs. H's sister was equally ardent in establishing her sister's pre-marital personality perfection. Having declared that her brother-in-law's actions were "unspeakable," she spoke at great length to prove that "it was all his fault" and her sister had been called on to "suffer as few others ever had." Mrs. H's father was sure "there never would have been any trouble, if the husband's mother hadn't kept butting in, trying to come between the young people"; Mr. H's father, on the other hand, "laid it all" to the action of a mean boss who refused to advance his son in salary.

Though the information obtained is often contradictory and not directly helpful, it is important to obtain as many facts as possible to evaluate them in terms of their bearing on the case. The elder Mrs. H's whole-souled condemnation of her daughter-in-law was helpful, not because her picture of her judgment was accurate but because her statements revealed the over-protection she had always lavished on her son; and much of his personality difficulty lay in his emotional dependence, in his expecting his wife "to baby" him as his mother always had.

The experience which relatives and friends can give as to early experiences and general attitudes and personality traits of the patient are particularly helpful. In the following discussion of the facts that are included in a psychiatric study, the reader will readily see that much of the information must come from sources other than the patient himself. It will not always be possible to obtain all the facts and factors hereinafter detailed, nor is it always necessary to do so; but this general statement holds true; the more detailed and explicit the psychiatric record, the more accurate will the diagnosis be, and the more specific can the treatment be.

GENERAL INFORMATION.—Name, age, sex, address, race, religion, occupation, financial status, marital status, referring physician, names and addresses of relatives and informants to be interviewed.

LIST OF PRESENT COMPLAINTS.—The list of presenting symptoms and complaints should be as complete and as specific as possible. In addition to the obvious symptoms and the complaints which the patient has most frequently made further inquiry should be made with reference to each organ system of the body. Frequently the informant either forgets or underestimates the importance of the additional symptoms; and it is necessary for the physician to have as complete a list as possible. One advantage of such an inclusive listing is that later on in treatment when the patient is discouraged and inclined to maintain that he is unimproved, he will be encouraged when he compares his present status with the initial enumeration of complaints and symptoms. It is well to have the informant be just as specific as possible about the symptoms. If, for example, such statements are made as, "He has queer ideas," or "He acts funny," get illustrative examples of the ideas and the actions. Or if some such statement as "She complains all the time of being tired," is made, find out as specifically as possible just how the weariness manifests itself, whether it varies with the time of day, in the presence of the family or strangers, etc.

A HISTORY OF THE PRESENT ILLNESS.—It is well to obtain the history of the present illness first in order to be better able to evaluate the factors later given under "Past History." The onset of the illness should be determined as definitely as possible. There is a tendency for the informant (the same

is true for patients also) to make some such vague statement as, "This symptom has been present for a long time; but it became much worse six months ago." Find out as exactly as possible when the patient last *felt well*.

Throughout the history it is well to date the incidents by the calendar months and the year. It is all too common to find psychiatric histories which tell of a patient's "falling ill the first time in 1932, and then at the age of twenty-nine getting a second attack, and six months ago having a third attack." Calendar dates of occurrence offer the best reference points and are always uniform. The history of the development of the present illness should be given in chronologic order, tabulating not only the development of the symptoms but also the occurrence of coincidental emotionally disturbing events. It is well to inquire for disturbing elements in the social, work, domestic, financial, ambitional, etc., fields whenever a new symptom appears or whenever an old symptom is intensified. In proper chronologic relationships there should be data on sleep, appetite, constipation, weight, sexual desire, menstruation, medication, and other pertinent information.

PAST HISTORY.—A detailed "past history" aims at determining all possible physical, environmental, and psychologic factors which may have played a part in the formation of the "sick personality." Such a history should include factors at birth (for example, forceps delivery or asphyxia neonatorum may have produced physical injury to the brain); the early developmental factors, such as the age at which the person first walked and talked (slowness in learning to walk and talk is often found in the history of feeble-mindedness); illnesses, operations, and accidents; information about the presence or absence of such symptoms as headaches, dizziness, aphonia, paralysis, anesthetics, tremors, convulsions, palpitation; gastrointestinal, cardiovascular, and genito-urinary difficulties; and the record of endurance and fatigue. Not only these, and similar, past *physical* factors need be determined; but inquiry must also be made with reference to environmental and psychologic determinants.

The physician needs to learn as much as he can about such things as: the emotional harmony between the parents and the effect of the parental personalities upon the child; the amount and role of financial stress, as it affected parental stability, the child's physical welfare, and the child's ability to "feel" himself "on a level with" his associates; early childhood traits such as enuresis, thumb-sucking, nailbiting, nightmares, stuttering, chorea, stealing, lying, restlessness, obedience, spoiled child tendencies, etc.; the school record: scholastic ability, adjustability and relationship to other children, age of and reason for leaving school, etc.; the age of beginning to work, the kind of work done, the ability to secure and to hold jobs, the numbers of and reasons for "quitting" or being "fired," his relations to his employers and to other workers, etc.; relation to the same and opposite sexes in terms of initial sociability, sex drive, types of sex experience, amount of concern over masturbation, prudishness, etc.; marriage and the adjustability to the mate, the ability to give as well as take, the ability to carry family responsibilities and to provide for the family, the interest in and care of the children; attitude towards parents and towards society; outstanding disappointments in love, in work, in social life; primary interests, hobbies and activities.

PERSONALITY TRAITS.—It is important to get from close friends or relatives detailed descriptions of the kind of personality which the patient had before the onset of the illness; for many psychotic symptoms are the exaggeration of some preëxisting personality trait. It is interesting to note that different informants will give widely varying descriptions of the personality under discussion, each in all honesty, each being unconsciously swayed by his own feelings toward the patient, and each having probably made his observations under different circumstances. The emphasis should always be on how the patient *felt* rather than on what he did or on the informant's judgment of his actions; for it is on the basis of understanding these early "feeling tones" that the physician can often analyze later symptoms. In making the record, use as much as possible the informant's own terminology, and wherever possible obtain examples of each abstract descriptive term used; for a word like "shyness," for example, may mean one thing to one person and something quite different to another.

The following list of personality traits is by no means exhaustive; but the physician should certainly inquire into such characteristics as: sensitivity, shyness, sociability, seclusiveness, friendliness, rigidity, plasticity, adjustability, stubbornness, indecisiveness, obstinacy, suspiciousness, jealousy, moodiness, restlessness, irritability, impulsiveness, anxiety, apprehensiveness, worry, efficiency, neatness, orderliness, meticulousness, disorderliness, indifference, tender-heartedness, cruelty, gentleness, aggressiveness, submissiveness, self-confidence, self-depreciation, self-discipline, excessive "religiosity" or moralism, apathy, excessive ambition, etc.

FAMILY HISTORY.—One should certainly endeavor to obtain a history of any formally diagnosed nervous or mental disease in the family such as psychosis, epilepsy, alcoholism, drug addiction, suicides, or any illness which required hospitalization in a sanitarium or mental institution. But in many, indeed in most, families there is little formal history of such disease. Instead, one can often find evidences of instability which, though apparently not intense enough to warrant the diagnosis of a disease, yet on close examination may prove to have offered much the same symptoms which the patient has in a more intense form. For example, many patients with manic-depressive psychoses have mothers who suffered severely from "menopausal" symptoms, wherein there were much agitation and restlessness and many crying spells. The so-called menopausal symptoms often were in reality evidences of a mild depression occurring during the menopausal period. Or the father may have suffered from some mild form of asthma or some comparable disease and at an early age retired, thereafter permitting his wife and children to support the family, while he himself spent much of his time day-dreaming. Such withdrawal from activity and responsibility may be identical in implication, though not intensity, with his son's schizophrenic illness. In obtaining a clear picture of the family history, therefore, one must seek to understand as fully as possible the outstanding personality traits of the forebears.

Direct Examination of the Patient

The examination of the patient is made both by objective observation of the patient and by a study of the subjective symptoms obtained from the patient. The careful and trained observer can tell much about the

nature of the patient's illness and even the reliability of the patient's statements. Examination of the patient is no formal routine procedure; it is an art which the assiduous student can develop to high perfection. So often one physician can obtain information which another will miss altogether. Fleeting frowns, momentary pauses, sudden clenching of the fists, a transient look of fear: all these are clues rather than symptoms, and yet all these when properly followed as to their cause may bring the physician to the source of the patient's difficulty far more quickly than can all the formal tests as yet devised. Even more fundamental is the attempt of the physician to place himself in what seems to be the frame of mind of the patient so as to be able to "feel with the patient." The ability to have sufficient imagination to identify one's self with the patient, while at the same time maintaining the necessary objectivity is the ideal to be approached both in understanding and in treating the emotionally ill person. In the direct examination, the physician both observes the patient objectively and questions him as to how he thinks and what he feels. The objective examination is in terms of: (1) appearance and behavior, (2) stream of speech.

APPEARANCE AND BEHAVIOR.—The trained observer can know much about the patient as the result of just "looking at him." Is the patient fastidiously dressed (as is the obsessive neurotic), or is he slovenly (as is the depressed or schizophrenic)? Is he active and alert (as in the manic state), sluggish and "low" (as in the depressive), or slow and preoccupied (as in schizophrenic)? Does the facial expression indicate vacuity and lack of comprehension of his surroundings (as is the case of patients with organic brain disease, such as senility, general paresis, brain tumor, etc.)? Is the facial expression mobile, laughing, interested (as in the manic), or is it solemn, depressed, and worried (as in the depressed patient)? Is it relatively immobile, with a "far-away" look (as in the schizophrenic); fixed and motionless (as in Parkinsonism); or sheepish and ashamed (as in the acute alcoholic on "the day after")? Are there expressions of fear (acute hallucinosis); of agitation and worry (involutional melancholia); of stertotypy, peculiar mannerisms, grimaces, postures (schizophrenic); etc.? So many of these facial expressions "run true to form" that the physician can rely rather securely on his observation of them; and in addition, he learns the art of catching fleeting expressions and the shades and nuances of the patient's feeling and thinking, as revealed by less obvious signs.

STREAM OF SPEECH.—Not only external appearance but speech, as well, offers much diagnostic help to the physician who is examining the patient. We are speaking here not of *what* the patient says but of his *manner* of speech. How, mechanically, does the patient formulate his words? There is the slurring speech of the general paretic, the scanning speech of the multiple sclerotic, the nasal twang of the patient with the diphtheritic paralysis of the uvula, the "hot potato in the mouth" speech of the patient with the bulbar palsy, the thick speech of the alcoholic, the broken speech of the stammerer, the hesitant, gesticulating speech of the motor aphasic, etc. Often just listening to the mechanics of the speech will tell much about the patient's illness; but only experience which is always accompanied by curiosity as to causes will train the person to understand these differences.

What is the character of the flow of speech? Is it rapid and fluid with good humor, or for that matter with pure anger, in the tone such as is found in the manic; or is it rapid, forced, tense, or with tremulous uncertainty as in the patient who is under great anxiety and tension? Is it rapid, violent, and hard, and accusatory in tone, as in the paranoid psychopath? The physician must remember that these "diagnoses" do not hold true unless there are other corroborating factors; but tones of voice and rapidity of speech can to the trained observer tell much. Is the speech slow? In the depressed patient the rate of speech is slow, but the tone of voice is depressed and what is said is said with great effort and hopelessness; in the catatonic schizophrenic patient, the speech is slow, but the slowness does not involve individual words so much as it does phrases, for in between phrases or sentences the patient is preoccupied and stares into space; in the adolescent asthenic girl who is shy, retiring, embarrassed, and suffering from mild neurotic symptoms, the speech is slow, but it carries with it a tone of shyness and embarrassment; in the patient recovering from the shock of an accident or of some acute illness, the speech is slow but the slowness of speech is associated with confusion, wonderment, and inability to recall what had happened.

What is the *content* of the speech? Is it a matter of fact coherent statement of a fairly well collected and intellectually objective person; or is the speech bitter and accusing, telling of "plots" against the patient, as is found in the schizophrenic? Is the speech endlessly circumlocutory and while coherent nevertheless never gets to the point, as found in the senile patient or in the early paranoid patient? Is the speech (as in the paranoid) constantly but evasively insinuating that something is at fault; though the patient, even on cross-examination, will make no direct admissions and is careful to "cover up" his ideas? Is the topic of speech a constantly shifting, "goalless one" such as occurs in mild manics, in confused states, or in senile states; or is the speech so irrelevant as to indicate marked intellectual deterioration? In the advanced schizophrenic there are incoherent, illogical, disconnected sentences or phrases, with many selfmade hybrid words (neologisms) or a constant stream of meaningless words and phrases joined senselessly together (word salad). In the manic state, there tends to be much rhyming of words and punning (for the manic, being highly distractible, is stimulated by the idea and sound of the uttered word to form a similar idea or sound in the next word) and very rapid speech (for the manic is under high pressure in everything, and since he has many ideas he cannot talk fast enough to get them all out, and so interrupts one train of thought [changing goals] in order to tell about another idea [flight of ideas]).

In recording the impression of the stream of speech, the physician should include some typical exact quotations. Moreover, in the description of the patient's speech it is well to describe simultaneously what else the patient does at the moment; for any one item, divorced from the rest, is not sufficient for diagnosis.

PATIENT'S OWN STORY OF THE ILLNESS.—In actual practice, when one interviews the patient, it is well to put the patient as much at ease as is possible, and then to have him tell his own story of the illness. Formal questioning should be deferred till the end of the story, unless the patient

will not respond except to direct questions. In putting the patient at ease, the more informal, casual, and "friendly" the attitude and manner of the physician the better. The less "self importance" (for "importance" in the examiner is conducive to making the patient ashamed and fearful of his innermost and personal feelings and therefore less inclined to relate them) the examiner, and the more he gives the patient the feeling that he, the examiner, is fully aware that the patient is suffering and is in need of courage and aid, the more quickly will the patient respond. Human events and emotions are not sharply defined, mathematically clear-cut events, and an insistence on definite answers is frustrating to the patient. Questions may be used to stimulate the patient, and to keep the circumstantial patient on the story.

In guiding the patient, it is well to ask first for a list of complaints so that there is a point to the patient's story, and also so that the physician will later be able to ask questions to bring out pertinent facts. Then the patient should be asked to "tell how it all began," and permitted to tell the story in his own words, with as little guidance as is necessary in order that a sequential report be given. It is interesting to note, that very often, the patient when he first comes to the physician is so choked with his emotional problems that he will provide information and clues of inestimable value if he is permitted to talk freely; whereas later, when he is less tense and more guarded, he may not reveal so easily the basic disturbing elements. In addition to the listing of his complaints and the formulation of the story of the onset and development of his illness, the patient should, at another interview, be asked for information on his early developmental history. This information is not so important from the chronologic point of view as it is from the point of view of *the way the patient has felt* about the various events which have occurred. After all, the patient's emotional disturbance is directly the outgrowth of *his* emotional responses to the various situations; and what might be an unimportant and un irritating situation to someone else may have been quite the reverse to him. In this connection it will be well to inquire into the prevalent need and into the various specific topics of concern.

MOOD AND PREOCCUPATIONS.—Does the patient feel depressed? Is he depressed over some specific difficulties, or is he depressed "for no reason at all?" When did he first become depressed? Was there some special event prior to or present at the onset of his "feelings," or did his "troubles" come after he felt depression? In many of the manic-depressive patients, the mood change occurred long before there was any environmentally disturbing situation; and only later did disturbing events arise upon which the patient then focussed his complaints. If the patient ascribes his mood difficulties to various incidents in his life, determine whether he has *consistently* felt so disturbed since the events; or, if to common sense, the incidents do not seem, to the examiner, to be severe enough to warrant a depression. Question patient carefully as to the way he felt before the onset of his "troubles." Does the patient cry? Does he have a pleasant exterior mask but evidence of tension by the clenching of his jaws, the rigidity of his posture, the tension in his voice, or an overly slow, subdued voice which indicates tremendous control or tension? Are there morning-evening variations in mood, as is so common in the depressive states?

Does the patient have any special topics of concern, and do these topics involve primarily his own inadequacy and fault (as is found in the delusions of the involuntional melancholic patient); or do they involve and blame others and outside influences (as in the paranoid patient)? Is the patient sufficiently aware that his ideas "are not quite right" so that he will say that "everything is all right," and only indirectly tell of his real thoughts? How is he treated by others? Has anything changed in the way things have occurred lately? Does the patient know any reason for feeling as he does or why he is prevented from accomplishing what he wishes? If the patient appears too circumstantial, one often can obtain the basic ideas by asking for "what possible explanations there may be for the strange things which have happened to the patient." One needs to inquire into false beliefs; and inasmuch as the patient does not deem "false" that which he believes, one needs to be careful to avoid the medical student's classical question of, "Do you have any delusions?" One can evaluate what is false only in the light of common sense; and so one needs to question the patient along every possible attitude which suggests itself to the examiner as he listens to the patient's story. There may be ideas of reference (everything which is said seems to the patient to have a special meaning for him), feelings of persecution, feelings of immense power, obsessions and compulsions, phobias, and feelings of hopelessness and guilt. Similarly, one needs to elicit false sensory impressions, such as the mistaking of the voice of the nurse for the call of the patient's wife (illusions) or the creation of altogether "imaginary" sounds or images (hallucinations).

INTELLECTUAL INTACTNESS.—One of the most important factors to be determined in the mental status examination is the intactness of the intellectual powers. In all the examinations described above, the questions have been directed at finding out what the person feels and what he thinks. An adequate psychiatric examination must discover not only *what* the patient is thinking, but also establish whether or not the patient *can* think. In the organic psychoses there is a physical disturbance of the function of the cerebral cortex; and since the cerebral cortex is the primary (if not the sole) center for thinking, disturbances in thinking ability presume disturbances in cortical intactness.¹

It is important to distinguish between the mutterings of the patient with organic psychoses, as for example in general paresis, and the "word salad" mutterings of the deteriorated schizophrenic patient in whom the brain cortex is (as far as we know today) intact. In the patient with organic psychosis the intellectual defect is the direct result of physical injury to the brain cells; in the schizophrenic patient, the apparent intellectual defect is not a lack of ability to think (for when one can obtain his cooperation the patient shows an excellent ability to reason and think about items which are impersonal), but rather the result of the fact that what he thinks is so distorted as to produce what is to everyone but himself a meaningless stream of speech. In many instances it is difficult to obtain the patient's coöperation sufficiently to perform a test of the intellectual intactness, and in such instances one cannot be sure of the status of the patient. In many cases, one can obtain a temporary coöperation by the use of the sodium amytal-caffeine exploratory method (*q. v.*) or following shock therapy.

¹ *Vide p. 358.*

Then too, it must be remembered that there are degrees of intellectual intactness. In the senile or general parietic patient there is impairment of memory; but in some patients the impairment may be mild and in others, severe. Only when one performs many types of tests can one find any defect in some patients with organic psychosis. Thus one general parietic passed the usual questions of a mental status examination, only to fail badly on the 100 minus 7 test (see under calculation). Furthermore one needs to be careful not to ask the patient to recall items which a "normal" person might find it difficult to recall. In such instances, the defect lies in the test and not in the one examined.

Finally, in questioning the patient to determine his intellectual defect one must remember that one is interested primarily in the *defect* and not in the general intellectual ability. Thus, for example, a person may not be able to subtract 7 from 100 and still be a "normal" feeble-minded person who is not suffering from any active disease process or any superimposed intellectual defect; whereas a second person whose background was that of a college mathematics professor may show signs of intellectual impairment if he is unable to give the square of the algebraic sum a plus b . It is thus obvious that in giving the tests and in evaluating the answers one must first know the person's "normal" capacity, and must then measure the answers in terms of that ability.

In testing for intellectual intactness, one subdivides the questions according to the various accepted evidences of intelligence: memory, orientation, general information, ability to calculate, judgment, and insight. One must never lose sight of the fact that these subdivisions are not important in themselves, but are merely indicative of the general intellectual intactness or defect of the person examined. The following outline should serve as a guide in the "formal mental status"; but the individual circumstances should decide the individual questions.

Mental Status Examination Form

ORIENTATION.—Does the patient know the date, the place in which he resides and where he is hospitalized, the names of the person to whom he is speaking and of those who are in charge of him? In the more severe cases the patient not only does not know the year, or the city where he is but may not know his own name. In the milder cases the patient may know the year and the month, but may be many days off on the exact date; he may know that he is in Chicago, for example, but may think that he is in a hotel; he may know his own name, but may think that the examiner is a detective or a revenue agent. In many instances of incipient organic psychosis, the orientation is intact. It is well to notice how quickly the patient grasps the significance of his surroundings and how quickly he can orient himself as to the meaning of questions, the nature of the examination, the identity of the entering nurse, etc. The amount of confusion present in the patient is often observable in the way he looks at the examiner, the facial expression of bewilderment, the hesitancy of his answers, etc.

MEMORY.—One can ask many formal questions to bring out the defect of memory; but much is unconsciously revealed as the patient tells his own story of the onset of his illness. The physician can compare the patient's

story with that derived from other sources: he can ask, after the patient's spontaneous story has been given, about dates of birth, of graduation from school, places of work, ages of children and parents, etc.

Such questions will supply information on the patient's remote memory; in many acute organic diseases (*e. g.*, Korsakoff's syndrome) the remote memory may be intact but that which has been recently learned, learned while the person's brain cells were under the influence of the toxic products,¹ may be defective. One can, therefore, test for the recent memory by questions concerning when he came to the hospital, what was the method of transportation and who brought him, what he ate for the last meal, or for supper the night before, what he has done during the day, etc.

Finally, one can test the memory as it actually is at the moment (present memory). The patient can be asked to recall five, six, or seven digits; he can be given the names of three cities and two minutes later asked to repeat them; he can be read a short one-paragraph story and asked as to the contents. If the patient is still in a state of confusion his present memory will be poor.

GENERAL INFORMATION.—One frequently-used procedure is the determination of the amount of information the patient has on subjects of general interest. Questions on these subjects test the patient's memory as well as indicate his general awareness. One questions the patient on the names of civic leaders (*e. g.*, president, mayor, governor, premiers, kings, dictators, etc.), on general geography including the names of the longest rivers, the largest cities, capitals of various countries, etc., and on current events.

ABILITY TO CALCULATE.—Sums and multiplications and divisions should be given to the patient in terms of his educational status. It is well to remember that solving such problems as 7 times 9 does not represent the ability to apply the rules for multiplication; for most persons have simply memorized the arithmetic tables, and their answer is an automatic one which does not show their calculating ability. One simple test requiring both concentration and fairly intact intellectual ability is the 100 minus 7 test, wherein the patient is asked to subtract 7 (or any other equally "hard" digit) from 100 and then 7 from each succeeding answer. Note is made of both the time taken and the number of errors made in performing this test. In the general paretic the time taken may be several minutes and there may be five to ten errors; in the grammar school graduate who is normal the test is completed in about one minute with one or two errors.

JUDGMENT.—This test would be better described as one to determine the patient's ability to do inductive and deductive reasoning. One can ask the patient to give his conclusions in the following, or similar, stories: My neighbors have been having some strange visitors. First a doctor came to the house, then a lawyer, then a minister. What do you think happened there?

The police found the body of a girl cut into eighteen pieces. They believe it to be a case of suicide. What do you think?

A burglar fell out of a thirteenth story window and on seeing the police got up and ran away? What do you think of this story?

An Indian coming to a big city for the first time saw a man riding down the street. The Indian said, "That man is funny. He walks sitting down." What was the white man riding?

¹ *Vide p. 374.*

INSIGHT.—Does the patient realize that his complaints are the result of a disturbance in his own way of thinking and feeling? Many different types of illness do not disturb insight, so that lack of it is not always diagnostic. Psychoneurotic persons may lack insight into the fact that their complaints are not organic, and they may insist that all their difficulties would be cured if only the physical basis of their symptom could be unearthed. On the other hand, many depressive patients will spontaneously say that they are depressed and cannot think so well, and to that extent they have insight; yet in the deeper phases of the depression these patients feel that everything is hopeless and have no insight into the fact that their feelings are based on false and diseased premises. Schizophrenic patients rarely have insight into their condition, except in a rare case in its earliest phases. The schizophrenic and paranoid patient so repress their basic feelings that they blame their symptoms on external factors (delusions) and so have no insight. In the organic psychoses, insight may be fairly good within the limits of intellectual comprehension: thus an early senile dementia, or an early general parietic patient may spontaneously tell of his memory's becoming poorer, or his "not thinking so clearly." The amount of insight a person possesses may be a prognostic factor in his recovery, although there are many depressive persons with excellent "intellectual" insight who are unable to control their actions or feelings. Manic patients rarely have insight into the fact that they are more active and euphoric than is normal.

It is well to question the patient as to whether or not he thinks he is ill; why he was brought to the hospital; what his illness consists of; what needs to be done in order for him to get well; and what changes will he make in his actions when he leaves the hospital.

SPECIAL TESTS.—There are many special examinations which one can give the psychiatric patient, but most of them require special training. There is the Binet-Simon intelligence test; the Rorschach "Ink-Blot" test, which has value in determining personality traits; the Jung (or other) association tests, which may furnish clue words to hidden traumatic experiences; the psychogalvanic test, which measures the electrical skin resistance to various emotional stimuli; the electroencephalograph, which is just coming into its own as a measurement of brain waves; etc. These tests require not only expert care in their administration, but equally great care in their interpretation.

CHAPTER XVI

THE ORGANIC PSYCHOSES

THE Organic Psychoses are characterized by a physicochemical disturbance involving the *cortex* of the brain in a *diffuse* fashion; by symptoms of deterioration of the intellectual processes, such as memory, ability to calculate, and judgment; and by psychopathic traits varying with the individual basic underlying prepsychotic personality.

The organic psychoses differ from the so-called constitutional psychoses such as schizophrenia or manic-depressive psychoses, in that the latter have no demonstrable pathology in the cortex (or elsewhere as far as we can prove today) nor do they show real defects in the purely intellectual processes such as memory and ability to calculate.

In the understanding of any one of the organic psychoses it is important to keep before one each of the three following factors: (a) the pathology; (b) the nature and extent of the changes in the purely intellectual functions; and (c) the kind of prepsychotic personality as well as the psychopathic personality present during the illness.

PATHOLOGIC CHANGES

The disease process, to produce a true organic psychosis, must involve the *cortex* of the brain, and must be relatively *diffuse* therein. Lesions which involve the subcortex, such as in Parkinson's disease or in subcortical hemorrhages which produce hemiplegias, do not produce a psychosis, unless there is sufficient destruction of the white matter so that the functioning of much of the cortex becomes impaired (as occurs late in encephalomyelitis periaxialis diffusa or Schilder's disease). Only when the *cortex* is involved directly as by trauma, infection or degeneration, or indirectly as by toxins does an organic psychosis occur. Similarly the damage must be *diffuse* to produce a psychosis; for local hemorrhages, trauma, and brain tumors do not of themselves produce mental symptoms unless the injury is diffuse or produces diffuse damage indirectly as in increased intracranial pressure. The pathologic states may be reversible as occurs in acute alcoholic psychoses or irreversible as in senile dementia.

Clinically, there are many persons who suffer from organic psychoses who appear to have constitutional or hereditary predisposing factors; in this category fall many persons who develop senile or arteriosclerotic dementias at an early age. Similarly, many persons have nervous systems which are easily susceptible to toxins, and these patients manifest deliria with the slightest degree of fever or infection.

The causes of these "mental" diseases are described in the usual pathologic categories: (a) toxic; (b) infectious; (c) degenerative; (d) traumatic; and (e) neoplastic. These various pathologic states produce a psychosis, only when the pathologic process involves the cortex of the brain in a diffuse fashion.

Under *toxic* factors may be listed such psychosis-producing agents as alcohol, and such drugs as bromide and hyoscine; toxic products present in such general diseases as pneumonia and typhoid fever (which produce what is ordinarily called a delirium, but which is more properly speaking, an acute organic psychosis); toxic states secondary to disturbances in endocrine activity, such as in hyperthyroidism; and toxic states resulting from vitamin deficiency, such as is found in pellagra. Any one of these toxic states if severe enough may disrupt the function of the cortex sufficiently so as to produce psychotic symptoms referable to: (a) intellectual processes and (b) personality reactions.

Similarly, *infectious* diseases which involve the cortex of the brain in a diffuse fashion may give rise to psychotic reactions. Thus syphilis, giving rise to a meningo-encephalitis produces the symptom complex which we know as general paresis. Any infectious disease may result in a psychosis, the acuteness of which often varies directly with the acuteness of the physical illness. However, these infections must be diffuse in character if they are to result in mental aberrations. A localized infection such as a brain abscess will not have such personality effects unless secondary complications occur, or unless the abscess is large enough to produce widespread inflammation. Moreover, the infection must involve the cortex of the brain; otherwise, as is the case of epidemic encephalitis, where the basal ganglia are primarily affected, there will be practically no mental disturbances except during the acute phase when the cortex is involved. In psychoses of infectious origin the symptoms will also be referred to the: (a) intellectual and (b) personality sphere.

Degenerative causes are most commonly seen as senile and arteriosclerotic dementias. In these conditions, the cerebral cortex

is usually gradually impaired pathologically, and the symptoms, therefore, come on gradually. In the senile and presenile dementias the pathology consists of a gradual dropping out of cortical cells, together with the formation of many plaques and fibrils. In the arteriosclerotic dementias, the cerebral circulation is impaired by the thickened blood vessels; and either as the result of anemia and anoxia, or of direct death of the cells from inadequate nourishment, the cerebral cortex is impaired in its function and intellectual and personality symptoms appear.

Traumatic psychoses are relatively infrequent in view of the tremendous number of injuries to the head sustained in automobile accidents. The reason for this infrequency of psychoses is that the traumatic injuries usually result in hemorrhage, concussion, or injury only to localized portions of the brain. Should, however, there be many petechial hemorrhages, and should large areas of the brain be involved, then psychotic symptoms will be produced. Minor reactions do occur frequently from head trauma, and these are often mistakenly called "neurotic," when they are in reality of organic origin. In a similar fashion, *tumors* of the brain rarely give rise to real psychotic states (1) unless the tumor is very large; (2) unless the tumor is so situated as to cause a marked rise in intracranial pressure; or (3) unless some major blood vessel is compressed by the tumor, thus producing anemia of a large part of the cortex.

The pathologic processes, as enumerated above, are many and various; but if these processes involve the cortex of the brain, in a diffuse fashion, then a psychosis may result. Whether a psychosis does result depends upon the severity of the disease process and, in the last analysis, upon the susceptibility of the brain. The symptoms which are common to all these psychoses are those which belong to the intelligence and the personality.

INTELLECTUAL SYMPTOMS

Man's ability to reason and think is primarily dependent upon the cortex of the brain. Learning processes, memory, coordinate and planned action, and judgment can be carried out only when the cortex is relatively intact. In animals if the cortex is destroyed, conditioning reflexes can hardly be established. The very anatomy of the brain indicates that the mass of the brain is composed of white matter or nerve tracts which lead to and from the cortical substance to the grey masses in the base of the brain and to

peripheral organs, so that there remains only the cells in the cortex with which to initiate thinking. Consequently, when some organic process, be it toxic, infectious, degenerative, traumatic, or neoplastic involves a sufficiently large portion of the cortex of the brain, thinking processes are interrupted. Accordingly, in all the organic psychoses, one of the cardinal groups of symptoms must be those resulting from impaired intelligence.

In a more detailed analysis, one may subdivide intelligence and test for its component parts. Intelligence¹ is based essentially on memory; and one of the first symptoms of the organic psychoses is impairment of recent and remote *memory*. A second symptom is disturbed *orientation* which again is largely another form of memory. Other ways of testing this intellectual defect are to inquire into the patient's *general information*, his *ability to calculate*, his *judgment*, and *insight*. By testing for these elements one can generally arrive at a fairly good estimation as to the degree of damage done to the cerebral cortex.

The extent of the damage done to the cortex and the acuteness of the primary disease process will determine the amount of intellectual damage.² The more the cortex is involved in the parieto-temporal region of the left hemisphere, the more the apparent damage to intelligence; for it is this area which contains the speech centers, and which when impaired gives rise to aphasia. If the disease is an acute meningitis, then the patient may be acutely delirious with complete loss of memory. If the disease is slower in onset, as for example in general paresis, the memory defect and the intellectual symptoms may come on more slowly and over a period of many months. Indeed, many paretics seem to have a good memory and yet fail when tested for more detailed ability. For example, a general paretic may be oriented, and seemingly fairly well informed, yet when asked to subtract 7 from 100 and then to subtract 7 from the result until he reaches zero, he will make many more mistakes than would a "normal" person of the same intellectual training. Should the process be even more gradual, as usually occurs in senile dementia, then the defects in memory are indeed slow in appearing; and the person appears normal for long periods of time, except that "he doesn't remember quite so easily as before." The various stages of memory defect thus depend upon many factors. In some diseases, such as

¹ *Vide* p. 351.

² In recent pathologic studies, extensive brain damage was found in persons who were apparently intellectually intact. In such cases the intactness is more apparent than real, for their responses to everyday situations are less the result of cerebration and more of gestalt and habit reactions.

Schilder's disease, it would seem that not the cortex but the white matter is involved, and yet a psychosis results; but in these instances, the psychosis does not occur until the cortex of the brain to which these white fibers are attached is sufficiently altered by retrograde degeneration.

Emotion as such does not have its origin in the cortex. Although emotion is apprehended by the cortex, and the significance of emotion may be modified by cortical content, *emotion itself is a feeling tone resulting from the state of the whole organism, probably having its integration in the thalamus.* Emotion and moods are highly integrated sensations springing from the state of the viscera, the efficiency of the cardiovascular system, endocrine balance, the state of nutrition, etc., as well as from pleasant experiences. It is common experience to "feel good" after a cold shower, or to be mellow, or hilarious after a few drinks of alcohol, or to be depressed and pessimistic after much fatigue. Such changes in the state of emotion result not from a "decision" of the person that he "will feel better" but from the physiologic actions of the aforementioned agencies. On the other hand, ideas may be depressing or stimulating to the degree that the person "feels" that which he thinks. The death of a stranger, for example, is accepted with intellectual appreciation but without any "feeling"; whereas death in the immediate family not only affects consciousness, but permeates through consciousness to the physiologic organism so that a state of "feeling" is aroused. Even death in one's own family is "felt" in proportion to the amount of physiologic reverberations which have become conditioned to the idea; *i. e.*, the depth and intensity of feeling are not identical with all members of the same family. Simple *intellectual awareness is not necessarily associated with emotion.* This fact is well seen, for example, in psychotherapy; the patient may understand that which is wrong, and know what to do, yet be unconvinced emotionally and therefore unable to implement his wishes. In psychotherapy it is essential not only to discover the underlying difficulties, and point out the correct mental hygiene, but so to train the patient that he "*feels*" that which he should think. To put it still another way, one may say that in training a person to be emotionally stable, one must in reality train the *physiologic* system to react and respond in a stable fashion.

The above statement, however, must not be taken to imply the unimportance of the cerebral cortex in the *control* of emotion. The cortex is to a large extent the means by which emotions can be stabilized; and the cortex can so direct the entire neuromuscular

system of the body as to produce elevations of blood pressure, contractions of the stomach, rapid or skipped heart beats, and so on. How the cortex acts is still unknown, but it is likely that the thalamo-cortical and the cortico-thalamic relationship is such as strongly to modify the action of both the cortex and the thalamus. Destruction of the cortex itself may bring about no emotional changes other than that the emotions may no longer have adequate control or that inhibitions may be excessively lost, thus releasing thalamic activity. This change is evident in many senile persons, who may have such a marked dropping out of cortical cells, that the control which they formerly exercised over their moods is impaired, and the basic emotions come to the fore.

Conversely, in diseases where the cortex is left relatively intact and the subcortex is involved, there may be tremendous outbursts of emotion, even though there is relatively good intelligence. This situation is best seen in post-encephalitic children, who are extremely unstable, and may be so disturbed in their behavior as to require institutionalization. In these children the disease involves primarily the subcortex, and although there is an affinity for the striate body, lesions occur throughout. The cortex is left relatively intact, so that though the child may be vicious, have temper tantrums, and be exceedingly destructive and combative, he may yet demonstrate an excellent intellectual ability. In such instances the emotional seat, the thalamus and the thalamo-cortical connections, has probably been impaired, so that emotional integration is interfered with. In adults this same reaction is not so common; but since many of the so-called psychopathic personalities¹ have similar outbursts of emotion, it may be that there is a similar basis in thalamic lesions.

Clear-cut instances of purely intellectual defect, or of purely emotional defect are uncommon because every person is such an admixture of emotions and intellect as to make rigid distinction impossible. Nevertheless the concept is of value in understanding the psychiatric illnesses.

PERSONALITY CHANGES

Every person has a personality peculiar to himself alone. A person may be a shy, sensitive type of person who does not mingle much with others, who prefers to read alone than to be in company, and who tends to daydream a great deal. At the opposite extreme is the person who is matter of fact, who with a shrug of his shoulders and with quick forgetting takes the irritations and insults

¹ *Vide* p. 463.

which life and his neighbors offer him, who delights in the company of others, and who prefers dealing with real facts to abstract day-dreaming. In between these extremes are many variations and degrees; those who are sadistic in character, others who complain much, are hypochondriacal, and neurotic in nature, still others who are silent and morose in nature, and so on.

When the cortex is involved in any person, then the controlling "intellect" and all the learned habits of response are interfered with. Consequently, the basic underlying personality, which has its roots in every portion of the human organism, tends to come to the fore. It is for this reason that the type of personality response in any of the organic psychoses varies according to the personality which existed before the illness; and the peculiarity of the personality in the psychosis will be but an accentuation of this underlying personality. Thus, the person who was shy, sensitive, withdrawn, daydreaming, suspicious, will when the inhibiting effect of the cortex is removed by disease, show signs of complete withdrawal, phantasy, and a paranoid suspiciousness sufficient to warrant the diagnosis of schizophrenia. On the other hand, the person who was outgoing, jovial, active, and full of pep and ideas, will when the inhibiting effect of the cortex is impaired, show signs of excessive happiness, marked elation, extreme restlessness and activity, and such rapidity of thought and speech as to have the flight of ideas which are found in the manic patient. In a similar fashion, the patient may have any type of psychiatric illness which can be described. The parietic patient may be schizophrenic, manic, depressed, psychopathic, neurotic, or simply demented, depending upon the form and structure of the personality at the time of the onset of his illness.

It has been a textbook error to describe general paretics as tending to be euphoric and grandiose; for while general paretics may develop such a personality outlook during their illness, this form would come under the excessive good feeling which is found in manic patients; and these general parietic patients may have delusions of persecution which are called schizophrenic or an intense feeling of inadequacy and a drive toward suicide which is found in depressed patients. The type of personality during the disease is *NOT* diagnostic of the type of illness, any more than the fact of intellectual defect is diagnostic. The intellectual defect and the form of personality defect are associates of cortical *pathology*, but not an indication of the *type* of pathology.

In describing the symptoms of any one of the organic psychoses, therefore, one should give three groups of symptoms for each ill-

ness: (1) symptoms of the disease as it involves parts of the body other than the cerebral cortex;¹ (2) symptoms resulting from intellectual defect, symptoms which are similar in all the organic psychoses and vary only in intensity; and (3) symptoms of a disturbed personality reaction, which depend upon the underlying personality and which may express themselves in any one of the psychiatric categories.

SPECIAL TYPES OF ORGANIC PSYCHOSES

In the following discussion we shall consider the various types of organic psychoses, and the treatment of each. In general, it may be stated that there are two types of treatment needed: (1) that for the specific disease present, and (2) that for the personality illness.

Organic Psychoses of Infectious Origin

General Paresis

General Paresis of the Insane (*Dementia Paralytica*) is more properly termed Luetic Meningo-encephalitis. It is a disease process caused by the *Spirocheta pallida*, involving primarily the leptomeninges and the cerebral cortex, and producing symptoms of neurologic damage, symptoms of intellectual impairment, and symptoms of a disturbed personality.

Luetic Meningo-encephalitis is a fairly common disease accounting for about 10 per cent of all admissions into the state mental institutions. It occurs about five times as frequently in men as in women. Although it is impossible to estimate the incidence of general paresis in relation to the number of syphilitic patients, it has been estimated that about one in every 200 patients who are infected with syphilis will develop a specific meningo-encephalitis. As a rule the meningo-encephalitis does not manifest itself for fifteen to twenty years after the initial infection, but there are many individual variations. The average age of onset is forty-four years, but infants may show signs of this illness (juvenile paresis) and others may not show evidences of it until the age of seventy. Although the disease usually comes on spontaneously, there are many instances wherein the disease is precipitated by trauma to the head. The disease is present in all nations and groups, but it is rarely found among malaria-infested natives, even though a high percentage of them suffer from syphilis.

¹ Neurologic symptoms may be considered in this category as signs of disease in the central nervous system—but not as involving mentation.

The pathology of syphilitic meningo-encephalitis is characteristic. The dura is adherent to the skull in places, and hemorrhagic pachymeningitis is sometimes present. The arachnoid is thickened and adherent to the pia mater. This thickening occurs typically over the dorsolateral surface of the brain, usually in the paracentral region. The brain is considerably shrunken in size often having lost one-third its weight. The frontal lobes show the greatest amount of atrophy. The subarachnoid and ventricular spaces are enlarged to compensate for this atrophy, and this fact may be determined by encephalography. The convolutions are shrunken and the sulci widened. Numerous small vascular lesions and scars may be found. Microscopically, there is thickening of the pia arachnoid; lymphocytic infiltration of the perivascular adventitial spaces, especially in the grey matter about the frontal cortex; a marked increase in the number of new blood vessels, apparently in an effort by the body to improve the cerebral circulation; a marked increase in the glial supporting tissue; and widespread destruction and disease of the ganglion cells. The ganglion cell disease may be in any stage, from that of mild cloudy swelling to complete degeneration and disappearance. It is the ability of a sufficient number of the partially diseased ganglion cells to recover that is at the basis of the recovery from general paresis. Chemically, there is an increase in the deposit of iron in the brain probably the result of an increased rate of degeneration of red blood cells. Bacteriologically, one finds spirochetes scattered through the brain; they can be cultured or, by the use of special stains, can be seen microscopically.

The symptomatology may be described under the three headings:

1. *Symptoms of Neurologic Origin.*—These symptoms include headaches which may shift in location, dizziness, and the well known Argyll Robertson pupil. The pupil is often small, irregular, and reacts to accommodation but not to light. If the pathologic involvement of the precentral motor area is mild there may be mild tremors throughout the body; tremors of the hands as seen in handwriting particularly with pen and ink; tremors of the tongue and lips so that words cannot be articulated clearly and so that the patient is unable to pronounce with his trembling tongue and lips such words as "constitution" or "Constantinople" or "rough riding artillery brigade," words which require the rapid manipulation of these organs of speech. If the cerebral motor area is more intensely involved not only by the direct dropping out of ganglion

cells, not only by the irritative effects of the inflammatory process, but also by thrombotic interference with the circulation secondary to the endarteritis, then actual epileptiform attacks will occur. Indeed, it is a good rule to remember that any patient who after the age of thirty develops epileptic attacks for the first time should be suspected either of luetic meningo-encephalitis or of brain tumor. Aphasic symptoms are liable to occur if the pathologic involvement is marked over Broca's area or over the supermarginal and angular gyri. If there is enough damage to the motor area to "release" (in the sense of Hughlings Jackson) the pyramidal tracts there will be evidences of upper motor neurone disease, such as Babinski signs, spastic gait, hyperactive patellar reflexes, and hemiplegic symptoms. If the spinal cord is involved in an associated tabetic phenomenon there will be absence of patellar reflexes and incoordination in walking. If the meninges are involved extensively the cranial nerves may be impinged as they pass through the meninges, resulting in pathology particularly of the third, sixth, seventh, and eighth nerves, and producing paralysis of the eye muscles, facial muscles, or the hearing sense.

The other physical signs are related to the laboratory findings. In practically all cases, the blood and spinal fluid show positive Wassermann reactions. In addition, the cerebrospinal fluid, though clear and colorless, has an increase in globulin (Ross-Jones Test), an increase in lymphocytic cells up to 200 in number, and the Lange gold curve shows a definite tendency to be high in the first part and low in the last part, a typical curve being 5555432000.

In the terminal state, the patient is completely demented and unaware of his surroundings. General muscular paralysis develops and a secondary infection usually ends his life.

2. The *symptoms of intellectual deficiency* described above are the same as those present in the other organic psychoses, differing only in rapidity of onset and in intensity. These symptoms result from the fact that the cortex is damaged and not from the kind of etiologic agent.

They usually take one or two years to develop and often begin quite insidiously with nothing more than signs of forgetfulness. At first names of business acquaintances are not well recalled, then appointments are forgotten. Simultaneously there is impairment of judgment. The patient is indecisive and unable to arrive at well thought out conclusions; his actions assume the characteristics of snap judgments which are faulty and reversible. The inhibiting power of the cortex is diminished and the person both

thinks and acts more and more in an unrestrained fashion. The wildest schemes are to the patient practical plausibilities, and the most capricious of his desires are matters for open and brutal satisfaction. During the period of active disease processes, the physical instability of the ganglion cells hampers the formation of new memory patterns and new concepts are poorly digested; on the other hand, well established memories and habit patterns of reactions are often retained, so that the patient is at the same time unable to recall many details of his childhood. If the habit patterns are well established the person may go along in his work despite his inefficiencies until the disease process has become more intense. In the more advanced stages the patient does not remember the date and even forgets his address. He forgets the simplest instructions immediately after they are given; and ideas upon which he may insist at one moment are forgotten in the next. He becomes confused on the current issues of the day and knows only in vaguest outline the topics of major public or even private interest. He cannot calculate well, and when he goes to the store he will return with the wrong change or he will make contradictory statements on prices. In the advanced stage he has no concept of his difficulties and performs the most ununderstandable of actions simply because of lack of judgment.

3. *The Personality Symptoms.*—Because the cortical influence is diminished by the disease there is a decreased control over the feeling of irritability or pleasure. Thus the slightest disturbance which in the normal person might create a fleeting, hardly noticeable resentment will result in a violent emotional outburst by the patient; conversely, the slightest flattery, attention, or wit which appeals to the patient will create uproarious laughter. Again, the lack of adequate cortical control enables the patient to change quickly from laughter to rage and *vice versa*. For the same reasons whatever the patient desires, whether it be in the nature of sex, of food, of alcohol, of approbation, he will tend to proceed to obtain it in the most direct method obvious to him and with disregard for the usual social customs. When these persons are prevented from satisfying their desires (which tend to fluctuate rapidly because of poor memory) irritability, and even paranoid trends will appear; and the patient may become combative and destructive.

With such a basis of personality disturbance present in most patients, though with varying degree of intensity, there may then follow one of several different forms of personality disturbance. These may be: (1) simple dementia; (2) manic or grandiose states;

(3) simple depressive states; (4) agitated depressive states; (5) schizophrenic states; (6) psychopathic personality states, and (7) psychoneurotic states. These various states depend upon underlying basic personality reactions.

In the simple dementia type, the patient shows only the signs of intellectual impairment plus mild emotional lability. Such a patient is cooperative, is not a problem in the wards, and shows only the mildest of irritability. Hallucinations and delusions are transient and unsystematized.

The psychoneurotic patient complains in great detail of many hypochondriacal symptoms. There are aches and pains over the entire body, particularly in the gastrointestinal tract. These symptoms follow the characteristics of tension symptoms but may also be the result of actual pathology within the central nervous system, as in paresthesias and "girdle" pains.

In the manic or grandiose phase, the patient is euphoric and loquacious. He feels very well and is willing that everyone else should be happy. Given to the natural boastful tendency which any manic patient has, the general parietic patient who lacks even the intellectual understanding of what he says gives away millions of dollars and many cars (delusions of grandeur). Often there is a constant stream of speech, and a tendency to laugh uncontrollably over his own often rather inane jokes. In some instances there is markedly increased physical activity; and, in some, the excitable stage is so marked as to render the patient unmanageable. In these manic patients the fluency of speech may confuse the superficial examiner into accepting the patient's intellect as normal.

The simple depression is seen when the patients speak of their hopelessness and unworthiness. As a result of their depression these patients have feelings of inadequacy and of mental retardation in addition to those resulting from the disease process. There is an intense feeling of depression and a drive towards suicide. In the agitated depressions there is superimposed on the feeling of "blueness" a restless apprehensiveness. The patients accuse themselves of having harmed someone; of having created insuperable difficulties for the family; of great fearfulness that they will be harmed or poisoned, even though they have drives toward suicide. In their extreme agitation as well as their lack of discrimination there are delusions of changes in their bodily organs, frightening hallucinations, and terrifying delusions.

In the schizophrenic forms, the patient is very sensitive and suspicious. He believes that his mistakes are not real but the

result of a persecution plot. The tendency to withdraw from social contacts and to live in a world of phantasy is similar to the same development in the early constitutional schizophrenic patient. Delusions of persecution, ideas of reference, hallucinations of voices talking about him, mental messages, and electric vibrations are all present. Indeed in some instances, the schizophrenic picture is so typical from a clinical point of view that the associated meningo-encephalitis may be overlooked.

In the psychopathic states one finds general paretic patients who indulge in vicious sadistic acts, who commit acts of crime and murder, who become alcoholic, or who have violently "insane" rages.

The whole gamut of psychiatric states thus may occur in the patient with this form of brain syphilis, the particular form of personality disturbance being related to the basic characteristic of the prepsychotic personality.

The treatment of luetic meningo-encephalitis must be carried out along two separate lines: the treatment of the syphilitic infection *per se*, and the treatment of the personality disturbance. In the first category the patient is given arsenic and fever therapy. The most commonly used arsenical is tryparsamide which is given once weekly for fifteen weeks and is succeeded by a course of fever therapy. Recently mapharsen has come into general use as an effective arsenical which will reach the brain tissue. In the use of these arsenicals it is well, because of the danger of optic atrophy, to check the visual fields at frequent intervals.

The treatment with arsenicals should continue until the blood and spinal fluid Wassermanns are negative. I use arsenicals once a week for three months with rest periods of three months. Others give weekly injections without rest. However, should these serologic tests remain positive after two years of treatment further therapy may not be advisable. In the vast majority of instances the patients improve clinically long before there is any change in the spinal fluids, and in a large percentage of cases the laboratory findings remain positive despite all therapy. In an extremely few instances all the laboratory findings may disappear under intensive therapy and the patient still remain with marked intellectual damage. In these cases, it is probable that the active syphilitic process has been arrested, but there is so much residual damage in the cerebral cortex that further improvement is impossible.

Fever therapy first came to the attention of von Jauregg who noticed the improvement in a debilitated general paretic following

recovery from a severe case of pneumonia. Today there are advocates for many forms of fever, such as malaria, rat bite fever, sulphur-in-oil, milk injections, killed bacteria, inductotherms, various heat cabinets, heat blankets, and even hot baths. The most commonly used methods are three: tertian malaria, typhoid bacilli, and heat cabinets. In these procedures it is common to give ten to twenty fever treatments; and where the temperature can be controlled, as in the artificial heat producing methods, the body temperature is permitted to rise to 105° or 106° for an hour and then slowly recede. If malaria is to be used, 1 cc. of blood from a malarial patient is injected intravenously, and if the general paretic patient is properly infected a chill will appear in one to two weeks. Ten to twenty chills are then permitted, depending upon the patient's reactions. The malaria is terminated by quinine or atabrine. In many patients repeated inoculations often fail to bring about malarial symptoms; while in others the reaction to an infection is so mild and the temperature so rarely rises above 102° that one needs to discontinue the treatment by an anti-malarial drug and to initiate another method. If typhoid bacilli are used, one should give 0.5 cc. of standard killed typhoid bacilli (1 billion bacilli per cc.) intravenously, on the first day and thereafter double the dose daily if necessary to produce temperatures of 105° to 106° .

When malaria is not used, it is possible to combine the arsenicals with the fever therapy; at the height of the fever the patient is given his tryparsamide or mapharsen intravenously. Exceptionally good results have been reported from this technique.

In addition to arsenic and fever, bismuth and potassium iodide are of value as in other forms of syphilis. General hygiene; a highly nutritious, high vitamin diet; care of the bowels; the securing of adequate sleep and mild exercise such as walking all facilitate the recovery.

By the use of the above techniques, approximately one-third of the patients seem to recover completely, one-third are considerably improved, and one-third fail to improve. However, statistics vary considerably with different clinics. It is difficult to prognosticate which patient will benefit from the treatment and which will not. Often a patient who appears almost wholly debilitated will make a complete physical and mental recovery, whereas a patient who seems only mildly affected will not respond.

The second phase of therapy is the management of the personality difficulties. The intellectual and personality disturbances are

often so marked that the patient needs care in a sanitarium or state hospital. In such institutions, in the past, there was only simple custodial care, in addition to the specific therapies. A better appreciation of the fact that there are underlying personality disturbances, however, prompted the use of electric shock therapy and of psychotherapy in selected cases. In unselected cases, these therapies did not meet with good results; but in those persons who have shown marked depressive or schizophrenic personalities prior to the illness, excellent results can be obtained by the use of convulsive shock treatments.¹ The whole field is open to further experimentation despite the neuropathologic fact that the diseased brain is susceptible to further damage. At any rate, in unrecovered cases one has little to lose and much to gain by such a procedure.

Finally psychotherapy is of great value in adjusting the patient. Many patients who have temper spells, who are irritable or impatient, who are overly sensitive or hypochondriacal can be markedly improved by discussion with them of their traits and by remodeling their habit patterns as suggested elsewhere in this book. Psychotherapy (or shock therapy) should be attempted after the regular antiluetic procedures have been tried.

Other forms of organic psychoses resulting from infectious processes fall under the categories of meningitis and encephalitis. The infection must be diffuse, however, in order to produce a psychosis; for in brain abscess, as stated above, such symptoms are uncommon till late in the disease. As a rule, the psychotic symptoms are acute and short lived, lasting only during the period of the acute infectious state. There are innumerable variations, dependent upon the intensity of the disease. Those persons who develop psychotic symptoms with a small amount of pathology tend to be markedly predisposed.

Under *Meningitis* may be listed such diseases as purulent non-meningococcic meningitis usually resulting from staphylococci, streptococci, or pneumococci and reaching the meninges by direct extension from a mastoid or head infection or through the blood stream; purulent meningococcic meningitis; chronic tuberculous meningitis; actinococcic, and torular meningitis. Under *Encephalitis* are included abscesses of the brain, multiple or single, large or small; tuberculomata (tuberculous abscesses); polio-encephalitis superior (Wernicke's); rabies; epidemic encephalitis; disseminated encephalitis (of unknown etiology); post-smallpox and post-rabies vaccinal encephalitis; post-exanthematous (mea-

¹ Vide p. 454.

sles, scarlet fever, chickenpox, smallpox) encephalitis; and other quite rare forms, such as encephalitis associated with trichinosis, cysticercus, malaria, and psittacosis.

Whenever psychotic symptoms occur in any of the infectious states listed above there are in addition to the three groups of symptoms (referrable to the disease processes elsewhere than in the brain, to the intellectual changes, and to the personality symptoms) symptoms of damage to focal areas of the brain, such as the motor area, the sensory, visual, olfactory, auditory, or speech areas. The symptoms of such focal damage to the brain fall under the category of neurologic damage, and indicate a site of the pathologic process.

In most instances the inflammatory process is so intense as to render the patient comatose rather than psychotic. Or, where there is an associated inflammation of the auditory and visual nerves, as there usually is from the circulating toxins as well as by direct contiguity, the nerve impulses thus set up are registered as sounds or visions and are colored by the imagery of the patient whose consciousness is unclear. This involvement of the sensory nerves and sensory cortex is the basis for the marked number of visual and auditory hallucinations in the acute organic psychoses.

Organic Psychoses of Toxic Origin

There are two general types of toxins which may involve the cerebral cortex: Exogenous toxins such as alcohol, drugs, and various poisons; and Endogenous toxins secondary to infectious diseases such as in pneumonia and typhoid fever, and second to metabolic toxins such as in hyperthyroidism and uremia. The kind of psychotic symptoms which will result depends upon the amount of toxin reaching the brain cells, the duration of the toxic state, and the susceptibility of the organism. In general, it may be stated: (1) that the psychosis (delirium) will be acute when a great amount of toxin reaches the brain in a short period of time; and (2) that the slow steady deterioration of the personality over a period of years is the result of a prolonged and continuous, though mild, "soaking" of the brain cells in the toxic substance. The most usual such chronic toxin is alcohol.

The Alcoholic Psychoses (See Alcoholism, page 471)

A striking phenomenon in the development of alcoholic psychoses is the marked variation in susceptibility to alcohol. Some

persons can drink large quantities of whiskey and remain relatively unimpaired during the course of a normal life; others become intoxicated quickly and suffer psychotic symptoms after a relatively short period of time. One reason for this variation lies not so much in a differing resistance of the brain cells but in the differing ability of the liver to transform the alcohol to sugar before too much damage can be done. Moreover, food deficiencies also predispose persons; and conversely, a balanced diet, high especially in vitamin B, tends to prevent the onset of both the intellectual and the neuritic changes which accompany alcohol.

The symptoms of alcoholic psychoses fall into the three groups outlined in the beginning of this chapter; and the variations between the different so-called "forms of alcoholism" are primarily a matter of the kind of prepsychotic personality, the concentration of alcohol in the brain, the duration of the toxic state, and, in the last analysis, the reversibility of injury to the ganglion cells.

The *Acute Alcoholic Intoxication* (drunkenness, acute alcoholic psychosis) is the result of the ingestion of a large quantity (keeping in mind the fact that what may be large for one person may be easily tolerated by another) of alcohol. The patient has the general signs of alcoholism: the flushed skin, the increased pulse rate, the heavy breathing, the thickness of speech, the unsteadiness of gait, the unsureness of motor control of the hands (resulting largely from the toxic state of the motor cortex), the odor of alcohol on the breath, the presence of alcohol in the urine, blood, etc. The intellectual functions are impaired, the degree also varying with the individual constitution and the amount of alcohol in the system. In the milder stages the keenness of immediate memory is blunted; for the toxic brain cell cannot, obviously, function so well as a normal one. The alcoholic cannot calculate with such lightning rapidity, nor is his judgment so keen. These changes do occur in the healthy person despite the fact that so many mildly intoxicated persons are mildly euphoric and therefore insist they can perform better, and despite the fact that so many mildly intoxicated persons have such release of inhibitions and such increased garrulity that they sound, especially to themselves, more profound than they do in normal life. As the alcoholic state is intensified, the above intellectual symptoms are intensified; and finally, when the brain cells have been enveloped by enough toxins, they function so poorly that the person loses consciousness and becomes comatose. Usually after a prolonged sleep the person awakens the next morning with the well known "hang-over" consisting of

nausea and a severe headache. These symptoms are often associated with acidosis resulting from the incompletely oxidized alcohol. As the day wears on and the normal physiology is reestablished the person tends to return to his usual state.

The treatment of the ordinary case of drunkenness is simply that of permitting the person to sleep and on his awakening of administering a large dose of alkali to counteract the acidosis, a mild sedative such as bromide or aspirin for the headache, and large quantities of water to facilitate elimination. In the more severe alcoholic stupors, it is advisable to do a gastric lavage as soon as possible and, if there are any signs of shock, to apply heat and inject intravenously 50 cc. of 50 per cent glucose. In extreme cases it becomes necessary to deal by a spinal puncture with the increased fluid pressure, resulting from the "wet brain."

If the alcoholism has been more chronic, there may be a more prolonged though reversible alcoholic state. These more chronic states are commonly termed delirium tremens, and acute alcoholic hallucinosis. In *Delirium Tremens* there is usually a history of prolonged drinking, often of one pint to a quart of whiskey daily for several months. The patient becomes more and more "nervous" and has marked tremors. When he awakens in the morning he feels "jittery" and uneasy and immediately needs a "drink" to "steady his nerves." Insomnia is intractable, and only large doses of alcohol will put the patient into sleep (coma?). The onset of the delirious symptoms may be sudden, with extreme restlessness, marked apprehensiveness, and hallucinations. Usually the hallucinations are the result of toxic state of the optic and auditory nerves as well as the toxic state of the cerebral cortex. The patient may see in his room large animals from which he shudders away, or he may have Lilliputian hallucinations, in which he sees small ants crawling over his bed and which he attempts to pick up. The bombardment of stimuli from the toxic auditory nerve is translated by the toxic cortex of the confused patient into the sound of accusing voices, loud shrieks, explosions, etc. The more sensitive and suspicious the patient is in his "natural" state, the more inclined is he to translate these noises into persecutory accusations. The fearfulness becomes so marked that the patient will throw himself about, attack those who approach him, or attempt suicide. The purely intellectual functions of memory, orientation, calculation, general information, etc., are considerably impaired. The physical condition of the patient is often grave and there are indications of complete physical collapse. Sleeplessness and anorexia

are marked; fever, leucocytosis, and rapid pulse are common. There is a marked tremor of the hands, the lips, the tongue. Polyneuritis is common. Lung infections are common, and pneumonia frequently terminates fatally. The patient may die of exhaustion or of cardiovascular failure.

Pathologically, one finds a markedly edematous brain, swollen ganglion cells, proliferation of the neuroglia, small diapedetic hemorrhages, and destruction of the myelin sheaths.

In *Acute Alcoholic Hallucinosi*s the same etiology and symptoms occur as in the delirium tremens with the exception that hallucinations and delusions are in marked prominence and there is evidence of slightly less excitement. Persons who develop this form of psychosis tend to have a strongly "introvert" or highly sensitive personality before the onset of the drinking, and tend to develop their acute symptoms with relatively smaller amounts of alcohol. Similarly, even under the best of care in the removal of the alcohol and its effects from the body, this group of persons will tend to remain psychotic for long periods of time and more special therapeutic measure such as shock treatments will have to be employed.

The *treatment* of delirium tremens and of alcoholic hallucinosis consists in removing the alcohol, decreasing the cerebral edema, improving the metabolic state by the use of a high vitamin diet and insulin, and securing proper rest. The interdicting of alcohol is the accepted procedure today, even though there are still many who advocate giving the patient decreasing doses of whiskey during the initial stage of the delirium. The stomach should be washed; elimination facilitated by large doses of magnesium sulphate, which also tends to eliminate fluids and thus decrease the cerebral edema; and paraldehyde, 3 2 to 4, given p.r.n. for sleep. Morphine and bromides should be avoided. If the patient appears to be in deep coma, intravenous sucrose, 50 cc. of a 50 per cent solution, or spinal drainage, is of life saving value.

One procedure which has proved of great value is the administration of insulin. There are variations in the technique of its administration, but 40 units of insulin may be given three times a day, and no food is permitted for an hour after the administration of the insulin. Care must be taken to watch the patient closely for hypoglycemic coma, but should this occur one can quickly revive the patient by intravenous glucose or by feeding with a nasal tube. An hour after the insulin is injected the patient is permitted to eat a hearty meal. Occasionally hypoglycemic symptoms occur two to three hours later, but these can be quickly checked by giving

fruit juice. Reports of this method of treatment, which can be given for several days as needed, are very favorable when contrasted with those obtained by other methods. The procedure presumably aids in the oxidation of the alcohol in the system as well as the restoration of normal metabolism.

The food should be highly nutritious and should contain all of the "natural" vitamins. In addition, the use of large doses of the vitamin B complex seems to aid in the prevention of neuritic symptoms and in establishing the general health of the patient. Hydrotherapy (especially warm baths) and paraldehyde for sleep should be used.

The therapy of the diseased personality, which still remains after the acute toxic symptoms are removed, is essential in order to prevent a recurrence of the condition. The details of this therapy are discussed in the chapter on Psychopathic Personality.

In the more chronic alcoholic states wherein the toxic effect of the alcohol is irreversible and in which many cerebral ganglion cells have been permanently destroyed, symptoms of permanent alcoholic deterioration occur. These deteriorated alcoholics have been classified under the headings of Korsakoff's syndrome, alcoholic pseudo-paresis, alcoholic encephalopathy, chronic alcoholic deterioration, etc. The variations between these different classifications is rather arbitrary; and in real life the distinction between the different groups is primarily one of intensity of intellectual damage; the involvement of such associated elements as the peripheral nerves; and the involvement of central motor neurones, as evidenced in epileptic seizures, in oculomotor palsies, and in striatal lesions. In *Korsakoff's syndrome* there is an acute onset with symptoms similar to that of delirium tremens, but instead of experiencing a complete recovery, the patient remains intensely disoriented, confused, tends to confabulate and has polyneuritis. Recent memory is presumably very poor while remote memory is often said to be intact. In most of the organic psychoses, where the etiologic agent acts for a long period of time in a relatively subacute fashion, the recent intellect is more impaired than the remote. This impairment of recent memory is the result of the fact that the cells are so damaged that perceptual impressions can be but poorly recorded, so that whatever has happened after prolonged drinking, or after brain cells have been permanently destroyed, is not recalled. On the other hand, incidents of the past which had been repeatedly thought of or acted upon may still be

recalled. In other words, those things of the past are remembered well in proportion to the strength of their habit element, though many things of the past are not recalled. In the Korsakoff's psychosis, the loss of recent memory and relative retention of remote memory will change to complete inability to remember when the alcoholic intake continues to the point of destroying most of the cortical cells.

The tendency to confabulate, to make up impossible stories, is a common practice among all patients with organic psychoses of subacute or chronic nature. The patient is asked "what he did yesterday," and, being unable, because of his poor memory, to recall what he did, he "invents" a story. Because his entire intellectual apparatus is involved and his logic is poor, the logicity of his invented story is often ludicrous. Thus a chronic alcoholic patient who had been in the ward for two weeks and had been in bed all that time, was asked what he had done "yesterday." He replied that his parents had visited him (they had been dead for five years), and that he had gone with them to visit his brother who was Governor of the state and head of the hospital (neither item was true).

Polyneuritic states are common. As indicated before, there is much evidence to show that the neuritis is the result of a vitamin deficiency, largely of the B complex, and that the alcohol serves as a precipitating factor. All the nerves in the body may be involved, primarily those in the lower extremities. The pain may be excruciating and difficult to relieve. Atrophies may result. As a rule, these neuritides tend to improve only after many months. When the extrinsic muscles of the eye are involved, there is probably some neuritis of the oculomotor, trochlear, and abducens nerves. The optic nerve may show signs of a retrobulbar neuritis with visual impairment. If degeneration or hemorrhages occur in the cortical motor area or along the pyramidal tract there may be convulsive reactions (alcoholic epilepsy).

The pathology of the far advanced chronic alcoholic state includes that of chronic pachymeningitis hemorrhagica interna, plaques due to old hemorrhages, thickening of the leptomeninges, atrophy of the cerebral cortex and of the entire brain, a chronic edema of the brain, focal areas of softening, destruction of the ganglion cells, destruction of the myelin sheaths, proliferation of the neuroglia, and innumerable small diapedetic hemorrhages scattered throughout the brain.

The therapy of the patient suffering from alcoholic deterioration may be divided into two phases: (1) to remove all traces of alcohol and its transitory effects from the body, and to bring the body to a maximum state of physical health; and (2) to evaluate the degree of adjustability the patient can make with the intellectual deficiency which will always remain; to provide an environment with a minimum of stress so that the adjustment can be made; and, by means of psychotherapy, to make the patient understand and accept his limitations as well as his new responsibilities.

The technique for the removing of all the traces of alcohol was outlined under the treatment of Delirium Tremens. When the acute effects of the alcohol have worn off, an effort should be made to cultivate the well-known principles of physical hygiene: of rest, good food, exercise, avoidance of excess in all spheres, etc. The second part of the therapy depends in large part upon how much intellectual impairment has occurred. Some of these persons may be able to live in the home of their parents or relatives under mild supervision and be able to perform many useful functions about the house. Some of these persons may be able and capable workers; for usually the physical strength can be brought back to normal. Many, however, realize the fact that their intellect is not adequate, and their pride is often seriously hurt by the actions of those about them and by their inability to do that which is expected of them. If their pride is hurt too seriously, the fact of poor intellectual ability will mean that they will translate the slurs against them into ideas of persecution and so develop delusions of all sorts. Because of tendency, the alcoholic patient may be potentially dangerous. In an adequately controlled environment such delusions need not develop, particularly if the patient is treated as an equal wherever possible.

Patients, however, who become abusive, intolerant, and difficult to get along with and those whose intellectual defect is too marked for external adjustment, need to be institutionalized. In institutions, a most important element in treatment is occupational therapy. For acute excitements, hydrotherapy, and sedation are advisable. Psychotherapy can do much to maintain an emotional stability among these persons particularly if they have some one in authority to whom they can turn for adjustment of their real or imagined grievances. Kindness will often work where nothing else will. Moreover, many patients who are now in institutions can be adjusted in the community under conditions set forth above.

Many other toxins which are exogenous in character can produce a toxic psychosis. The individual types of symptoms depend,

again, upon the nature of the toxin and its effect upon the general organism, the amount of damage to the cerebral cortex *per se*, and the kind of personality which existed before the onset of the psychosis. Differentiation between the toxic psychoses produced by the many different kinds of toxins cannot be established by studying the kind of psychosis which exists; the differentiation must be based on the history, the chemical analysis of bodily substances, and the presence of physical signs and symptoms. Toxic psychoses may be produced by lead, by arsenic, by mercury, by manganese, by mescaline, by nicotine, by various food and plant poisons, and by many different kinds of drugs. Treatment must be directed at removing the causative agent. Narcotics rarely produce toxic psychoses; the personality structures are markedly altered, however, in drug addiction, (*q. v.*) and need to be treated in a separate fashion.

Bromide Delirium

One of the most common of the drugs which produce a toxic psychosis is the bromide. The bromide ion acts in large measure by replacing the chloride ion in the blood stream so that there is the positive effect of the bromide plus the loss of the chloride. In normal persons, toxic states are relatively easily produced by this drug; and in persons who are already in a weakened physical condition, whether it be the result of a physical disease, of arteriosclerosis, of alcoholism, or any other condition, this drug has an even greater toxic-producing effect. Consequently, one should use bromides with caution in persons suffering from infectious diseases, or in any case where the brain may be damaged, as in cerebral arteriosclerosis.

Bromide psychosis (delirium) is far less frequent today than it was a decade ago when the public was less educated, and when many persons were addicted to the liberal use of patent medicines without the advice of a physician. Headache powders frequently contained an abundance of this drug. The advent of governmental regulations and the education of the populace have effected a material reduction in this type of illness.

The symptoms of bromide addiction are: (1) physical, (2) intellectual, and (3) psychological. Typical physical symptoms are: acneiform rash, coated tongue, fetid breath, tremor of the lips, tongue, and hands, slurring speech, tinnitus, staggering gait, alteration in the tendon reflexes, and the presence of bromide in the blood stream. There is a marked variation in the individual susceptibility, but the blood bromide level is usually about 150 mg.

per cent before delirious symptoms result. Intellectual symptoms are those of disorientation, impairment of memory, disturbance in the ability to calculate, poor judgment and insight. In the layman's terms, the patient is confused. The intensity of the intellectual impairment is often the result not only of the amount of bromides involving the cerebral cortex, but usually, also, the pre-existing brain impairment which prompted the use of the drug. Personality disturbances show such variations as: mild sluggishness and sadness (depressive symptoms), mild euphoria and excitement (manic symptoms), delusions of persecutions and ideas of paranoid nature (schizophrenic symptoms), and marked and many hypochondriacal complaints (neurotic tension symptoms). Hallucinations of sight and sound are common in all of the toxic psychoses, more as the result of a toxic stimulation of the sensory nerves and sensory cortex than as a psychologic phenomenon, although practically every hallucination has psychologic coloring.

One of the common errors is the attempt by the use of bromide to quiet a disturbed patient who is suffering from a toxic state following an infectious disease or following an operation. The result, at first, is a sufficient bromide toxicity to "numb" the patient; and then, as the patient recovers slightly, the irritative effects of the bromide lead to further confusion. A vicious cycle is thus created in which drugs are increased in dosage and alternating stages of coma and delirium are produced. Bromides are not the drug of choice for quieting already confused patients, or those suffering from chronic physical diseases.

The treatment of bromide delirium consists of: removing the drug, using large doses of sodium chloride (10 grams daily with large quantities of water), and giving a highly nutritious diet, rich particularly in vitamins. If necessary, intravenous normal salt solutions may be used. Often several days are required to obtain improvement, and during this time sedation should be avoided if possible. Warm continuous baths should be used with the temperature of the water maintained at 94° to 96°. Similarly, sedative cold wet packs may be used. Efforts should not be made to keep the patient quiet unless it is absolutely necessary; for the added medication so used tends to increase the toxic state. Good nursing care, a room separated from the main hospital wing, windows protected lest the patient fall out, and a room containing only unbreakable essentials in which the patient may wander are the best means to facilitate the patient's recovery. The patient

need not be in bed in such a room, but may move about and relieve much of his tension by his activity. If a sedative is needed, morphine, alone, in small repeated doses may be used.

When the patient has recovered from his delirium, therapy should be directed at the underlying illness. For the acne, Fowler's solution beginning with the usual small dosage of 3 minims a day and increasing to 10 minims t.i.d. is often very effective.

TOXIC PSYCHOSES (DELIRIA) ASSOCIATED WITH TOXIC-INFECTIOUS DISEASES

The most common form of toxic psychoses is that of *delirium* associated with infectious diseases (pneumonia, typhoid fever, septicemia, erysipelas, etc.), with disturbances of internal secretion (hyperthyroidism), with endogenously produced toxins (as in uremia, and eclampsia), and in vitamin deficiency diseases (as in pellagra). These apparently unrelated states have one factor in common; namely, that of producing toxin which will disturb the normal functional activity of the cerebral cortex. The actual advent of the psychosis depends upon the amount of toxins circulating in the blood stream, the relative health of the cerebral cortex, and the constitutional susceptibility.

The symptoms of such deliria fall again into the three usual categories: (1) those physical signs and symptoms characteristic of the etiologic agent, these signs being evidences not only of illness in the body in general but also of neurologic damage; (2) intellectual impairment as shown in disorientation (confusion), memory impairment, etc.; and (3) personality changes of depression, excitement, schizophrenic symptoms, or psychoneurotic symptoms. Included in this last category are the hallucinations which are the result of the combined action of toxic stimulation of the sensory nerves and the "psychologic" interpretation of those stimuli.

The *treatment of such delirium* involves: (1) reducing high fever which in itself is delirium producing; (2) avoiding the use of toxic sedatives (see under Bromides) which add further to the toxicity of the brain; (3) maintaining the correct fluid balance by forcing fluids in the usual patient in order to promote elimination, but limiting fluids where there is cerebral edema, such as is present in acute alcoholic states; (4) improving the nutritional state of the organism by a diet high in calories and well fortified with vitamins (insulin, 10 to 20 units one-half hour before meals often aids both in producing an appetite and in quieting the patient); (5) main-

taining an optimum functioning of cardio-renal conditions utilizing cardiac and renal therapies where needed; (6) securing rest and sleep by the use of a quiet, darkened room, a reassuring nurse, frequent alcoholic sponges, a cold wet pack (the patient is wrapped in a sheet which has been wrung out in water of 65° to 70°, and then covered with a warm blanket), and if necessary, small repeated doses of morphine (grains $\frac{1}{4}$).

The nursing care is a most valuable factor in the treatment of delirious persons, and the personality of the nurse is of utmost importance. She should be not only efficient, but tactful, calm, and able to reassure the patient. The toxic patient is confused, and such confusion is frightening. Sensations are imperfectly perceived and misinterpreted. The anxiety colors the interpretation of the physically (toxically) stimulated nerve fibers, and horrifying illusions and hallucinations are experienced. In such a setting, an unsympathetic, mathematically efficient and "brilliant" nurse is of little value; for the patient's reasoning is impaired and the appeal to him must be made through his emotions. In such instances the calm steady voice and hand of the nurse are very quieting. Particularly at dawn and in the evening twilight, when the poorness of the light makes for mistaken impressions, there is much added agitation, and a reassuring nurse is of the most value.

When the delirious patient is absolutely determined to get up it is often much wiser to permit him to sit up or even for the moment to stand up, and then by gentle persistence lead him back to bed, rather than to make him expend a great deal of energy by struggling against restraining sheets, straps, or persons. Patients become covered with perspiration, their temperature rises, and they become exhausted by such struggling during which they may manifest "great" energy—a false energy made possible by an acute sense of fear. Much patience is required to deal with such a patient without the use of restraints, but correspondingly much is gained. One can, by sitting on the bed beside the patient, permit the patient to try to get up; in order to arise the patient has to push aside the nurse, and her passive resistance is often sufficient to tire the patient who will soon fall back tired. Such passive resistance often accomplishes the purpose of keeping the patient in bed far better than fighting with the patient to keep him prone.

In such situations, the nurse must not be afraid, or at least must not show fear. Rarely can a delirious and weak patient harm a healthy nurse; and the evidence of fear in the nurse communicates itself quickly to an already fearful patient and thus creates a vicious cycle.

The rooms of delirious patients should, where possible, be away from the main hospital wards so that shouting by the patient will not be disturbing to others. It is unwise to try to "quiet" the patient by the use of large doses of medication. Small doses of morphine may be used, but care should be taken that an already toxic respiratory center is not too depressed.

Where restraint is essential, a restraining sheet passed across the bed and wound around the bars of the bed may help. Side boards, well padded, will prevent the patient from bruising himself. Wrist and ankle straps should be avoided if at all possible.

Hydrotherapy, as mentioned above, is the best form of sedation. Ice-bags to the head, a prolonged neutral bath (temperature of 96°), cold wet packs, frequent alcohol sponges are likewise of great value.

Sedatives, as mentioned, should be avoided where possible. Since morphine is the least toxic of all, it is the drug of choice, and it may be used freely in the ordinary delirious patient; for the fact of the delirium tends to militate against habituation. Other drugs of value are paraldehyde (orally or rectally), and intravenous sodium amytal. One should beware of the great synergistic effect between morphine and the barbiturates. Cases of cardio-respiratory failure have resulted from the simultaneous use of these two drugs given in otherwise non-lethal doses.

When the acute delirium subsides, and the patient continues in a postoperative or post-infectious psychosis long after the toxic elements have been removed, one should then use electric shock therapy.¹ Often spectacular results may be brought about by two or four shock treatments of such chronic deliria, deliria which have proved resistant to all other forms of therapy. Such shock therapy should be given relatively early while the cortical changes are still reversible.

PSYCHOSES ASSOCIATED WITH DEGENERATIVE DISEASES

The most common form of psychoses due to degenerative processes is that of senile dementia. Indeed, *Senile Dementia* and the related arteriosclerotic dementia form from one-third to one-half the number of all first admissions to state mental institutions. Senile dementia occurs usually after the age of sixty; although presenile dementia may occur as early as forty, while in others no observable dementia will occur even at a markedly "ripe

¹ Vide p. 454.

old age." One needs to question the significance of the term "dementia" as applied to these conditions. In some octogenarians, the rapidity of the thought process is distinctly slower than it was earlier in life; but such slowness does not indicate dementia, despite the fact that the retardation is the result of the same pathologic process; namely, the dying out of cerebral ganglion cells. Sometimes, there is a marked impairment of memory and of the ordinary intellectual processes; though the aged person is still capable of going about his usual habitat and is able to adjust fairly well, even though at a less efficient than usual level. One may speak of such a person as suffering from dementia yet as still capable of adjustment outside a hospital. Finally, there is the person whose intellectual deficiencies are so marked that only institutionalization care is feasible. Such persons are markedly demented. In consequence, the word "dementia" should always be accompanied by a statement as to the level of adjustment which is possible for the patient.

The essential pathology of senile dementia is an abiotrophy of the ganglion cells of the cerebral cortex. As a result of this "death from old age" of the cells, there is the shrinking and grossly observable atrophy of the brain, widening of the sulci and fissures, dilation of the ventricles, areas of cortex without cells, and other areas with "senile plaques," which consist of microglial cells and disintegrated ganglion and glial cells. Many of the ganglion cells which remain are shrunken, pigmented, vacuolated, and filled with lipoids or granules. Neurofibrils form loops or baskets. Even the basal ganglia are shrunken in appearance.

The question why senile psychosis develops in one group of persons and not in another is difficult to answer. It is not unlikely that heredity plays the primary role in determining both the longevity of the person himself and the longevity of the individual ganglion cells in his brain. Yet with the advent of our understanding of the science of geriatrics we find that there are many factors which make for early senility, many factors which can be overcome. Chronic debilitating states, for example, eventually take their toll of cerebral efficiency: there is chronic anoxia secondary to cerebral arteriosclerosis, diabetes, or cardiac insufficiency; there are chronic toxic states, such as those associated with kidney disturbance or with some mild but persistent focus of infection; there is excessive (for the aged) fatigue; there is the sudden cessation of activity in an energetic person; there is an inadequacy of diet, especially as related to vitamins. All of these factors may play a great role in

the production of senile dementia; and many of the conditions thus produced can be anticipated and the aging process slowed.

The symptoms of the aged person can be described in three main categories. The *physical* appearance is characteristic. The shrinking of the intervertebral discs causes a decrease in the stature, and at the same time there is a tendency towards kyphosis. The bones show a decrease in organic matter so that there is a relative increase in mineral matter. They are thus more brittle, and often among the aged fractures result from slight injuries. The cartilage at the joints also shows evidences of attrition; there results hardening of the synovial sacs, conversion of smooth cartilage to fibrous tissue, and in some cases, actual calcification of the joints. The muscles are shrunken, and weak; primary atrophy occurs in some, and fatty infiltration and secondary atrophy occurs in others. Ligaments lose their elasticity and become stiff. The skin becomes thin, dry, inelastic, and parchment-like, and usually, because of the waste of the subcutaneous fat, it becomes loose and falls into folds. Pigment is deposited to form large "spots." Because of the general loss of subcutaneous tissue, the bony prominences are more obvious. The hair becomes grey, sparse, and thin; the nails, brittle and dry, and often with marked overgrowth in the toe nails. The internal organs also show the tendency towards atrophy, with the substitution of fibrous for muscle and gland structure. In some organs, such as the prostate, there is often an overgrowth of tissue. The heart muscle also atrophies and becomes fibrous; hypertrophy is a compensatory phenomenon. The blood vessels become hardened and "arteriosclerotic" because of the replacement of muscle by fibrous tissue. Visual efficiency decreases, and the "arcus senilis" is present. Hearing likewise is impaired.

In other words, in senility, dementia is but one symptom of general physical senility. For this reason, persons with senile dementia should be sent, not to state "mental" institutions but to institutions specially designed for old age in general.

The *intellectual* changes are usually the first evidences of the dementia. At first the patient's memory shows evidences of impairment. Names are not easily recalled, stories are retold, items are mislaid. The memory defect increases slowly and eventually the patient becomes disoriented; the disturbed ability to calculate is evidenced by failure to get the correct change at the grocery store; the judgment becomes poorer; and knowledge of current events is decreased. When the intellectual deterioration is marked

the patient does not know his name, does not know where he lives, how old he is, whether or not he is married, how many children he has; and often he begins to ask for his mother or father who have been dead for over two or three decades. It is this intellectual deterioration which is at the basis for so much of the personality change within the patient.

Personality changes are extremely common. As a rule these persons are aware of their decreasing abilities. Many of them become irritable because they realize their inadequacy, and express their irritability against those whom they know well and with whom they can no longer be on equal terms. For similar reasons, these patients often become depressed, and suicide is not uncommon. Failing to keep up with new changes and ideas because of his inadequate cortex, the patient tends to become conservative to an extreme, and lives in the memories of "the good old days," which were the days when he had his faculties and could exercise some influence on the environment. In compensatory fashion, he may become egotistical, and even suspicious of those whom he cannot fully understand. Yet, many senile persons remain fairly happy and content and give rise to little irritation to those about them.

In other persons, the damage to the cerebral cortex "releases" an unstable personality. In consequence, there may be an acute manic excitement, an acute depression, marked schizophrenic and paranoid tendencies, or a severe psychoneurotic state. The symptoms of these personality states are those which are present in the "non-organic" psychoses, with the difference that the failure of the memory to function perfectly tends to result in a less systematized delusional state, and in less of an emotional drive.

Therapy of the Aged.—The treatment of senile states is primarily prophylactic. It is important to impress on each person the limitations and the capacities of his aging self, and to provide the patient with a proper mental attitude towards the aging process. It is important to regard the aging body not as a diseased state but as *an organism with modified capacities*.

The physical care of the senile patient must be carefully regulated. The amount of physical work done should be curtailed, not in any arbitrary fashion, but to the point short of fatigue. If he is employed or if there is housework to be done, the amount of work which the patient *expects from himself* must be limited. On the other hand, complete cessation of work is to be avoided. The aged person is often accustomed to a definite routine, and the total

organism seems to be attuned to that kind of activity. For an active man suddenly to cease his work, and to "play golf" brings about restlessness; an increased awareness of his limitations; and, contrary to what would be expected, an acceleration of senility. The total organism finds it difficult to lose one set of habits and suddenly acquire a new set. The physician should advise, therefore, a lessening but not a cessation of work.

After fifty, periodic health examinations should be carried out regularly. These examinations should include a determination of the amount of cardiac reserve under exertion tests, blood pressure studies, urinalysis, and gastrointestinal investigations. Such studies can then dictate the amount of exertion permissible as well as provide for early detection of remediable disease processes. Provisions should be made for moderate amounts of physical exercise, for proper sleep, for adequate elimination, and for the removal of focal infections. The diet should avoid rich, highly seasoned, or heavily fried foods. As a rule, the diet should be calculated in terms of the patient's basal requirements plus that needed for his activity; too often old persons eat inordinately and out of proportion to their needs; and obesity seems to be an adverse factor in longevity.

Vitamins constitute a most important food factor for proper health in old age. There are many conjectures on the decreased ability of the intestinal tract to absorb vitamins, and on the increased need of the organism for these life-giving substances; but clinical evidence seems to support the contention that large doses of vitamins, particularly the vitamins of the B complex and of C, aid in longevity. All the vitamins should be provided for, especially in a balanced diet, but supplemental "pills" with these catalysts should also be administered.

Alcohol—an ounce before the evening meal and before retiring—is very beneficial in many instances. The dangers of alcoholism are few and the vasodilator effect of alcohol on the cardiac vessels often aids cardiac function. The stimulating effect on the brain increases the patient's cheerfulness, and in this way improves the physical function. Like any medication, however, too much alcohol will be detrimental—and actual damage to the stomach and heart may occur. But in moderation, alcohol in doses suggested above, should be regarded as a useful medication.

The factor of mental hygiene, as a prophylactic agent against personality disturbances, is of inestimable value. This mental hygiene must be administered carefully, and with a sympathetic

attitude. One needs to be careful not suddenly to shock the patient with the statement that he is an "old man" and "must be careful." There is a finality about such a statement, which carries the implication that everything henceforth is futile and hopeless. On the other hand, one can accomplish the same end result by giving the needed suggestions in terms of "You are not so young as you used to be." Indeed, every patient who is over sixty, and many who are much younger, should be urged to "take it easy." Of course, such advice should be dependent upon individual abilities; for some men at seventy-five are active, determined leaders with sufficient aggressiveness and energy to enable them to continue their enterprises with but a minimum of restrictions; whereas other men are "old" at fifty, and need much curtailment. Generally speaking, however, the advice on physical functions, on diet, on sleep, on avoidance of too great responsibilities should be given to most sexagenarians. This advice should be given fairly early, for often years are needed before the patient can learn the new habits of adjustment.

One of the specific suggestions which can be given is for the adoption of a philosophy of perspective. One can comment to the person that he has reached a stage of maturity. Maturity, it should be pointed out to the patient, means a ripening, a coming to an optimum state of wisdom and understanding. Maturity means a tolerance of human frailties in general, and of one's own inadequacies in particular. The person who has reached his three-score years should have come to an understanding of his own life in relation to others, of the relationship between man and nature, between this age and those which have gone before and are yet to come.¹ In maturity, man has lost the great intensity of emotions present in youth, and in its place comes contentment, peace, and tolerance based on humility before the splendor and magnificence of the works of nature and of his own fleeting moment. In maturity man neither sneers nor rebukes nor is he hilariously happy—he is amused, or saddened. He reflects; and the memories of the past parade before him from their inception to their completion, and from that passing review he develops a perspective upon the present. His hopes and ambitions are not fiery, blazing drives for the ultimate ideal, but a steady, consistent working out of the present. The mature man smiles much, and is mellow. He is not primarily a man of action, though he does what he knows he should do; primarily he is a man of experience who needs to pass on to the impatient youngster what he has learned, all the

¹ *Vide* p. 497.

while remembering how impatient he himself was of the advising elders, and all the while remembering that youth, too, has its ideas and values, some of which may be better than his. The mellow man is not jealous, nor is he given to temper outbursts or to sullen resentment—rather he understands and avoids blaming—he overlooks and forgets. Always he encourages.

To many men such a discussion is at first "tommyrot." To them, such ideas are idealistic absurdities which can never apply to the "practical" man. But despite such initial criticism, the physician can point out many men who have approximated the ideal maturity. He can point out the feeling of pleasure which accompanies having "conquered one's self," and speak of the boomerang effect of such violent emotions as hate and fear. Specific incidents in the patient's own life wherein he has acted contrary to, and therefore unwisely, to the above ideal can be indicated. One can give the analogy of the pleasantness of ripening fruit in comparison to its hard, bitter, unripe state. And, as time goes by, and as specific problems which the patient presents within his own life are discussed and analyzed and explained in terms of the ideal, he will gradually mellow and learn to lead a life in which both he and his body are infinitely more happy.

In such a discussion, plans for one's later years are encouraged. The physician should give personal advice, on specific problems; he should encourage the patient to speak freely, and to air his basic frustrations, his fears, and his desires. Many aging persons are in mortal terror over the prospect of financial impoverishment, of "being left alone," of the concept of "no longer being." These and other topics should be openly discussed. Financial situations may not be so acute or distressing as the patient has feared them to be. Often the dread of eventually being without economic security vitiates all the pleasure which could be derived from existent funds which are available for a long period of time. Moreover the present social legislation seems to insure that old persons will not suffer from insufficient food, at any rate. The prospect of "being all alone," can be provided against in advance by being with one's family where possible, or by joining some club or home for the aged. The foreboding of death and dread of the idea of no longer living can (1) be accepted intellectually, especially by comparisons with the death of his own parents, by the observations in nature, and (2) be minimized by increasing his interests and activities to the point where he will not have too much time to think of the time when he is no more.

The aged should make plans and act *as if* they were to live for an uncounted number of years. Their plans should be goals and ideals for which they should continue to strive no matter what their age. By so doing they not only have an interest which makes them forget about themselves, they not only accomplish something instead of just waiting for the end, but it is my clinical impression that by so working for a goal they actually live longer and are healthier because of their activity. When these persons ask, "What will happen to my plans if I suddenly die—isn't everything futile?" one answers, in effect, that in such instance they certainly will have lost little; that the work started may continue; and that, in all probability, they will live long enough to see their plans completed. In any case, even though the end may not be seen, there is much more happiness to be derived from working than from simple fretting.

All these steps need to be taken during the early sixties, if not before, in order to provide a frame of mind and a background of training so that when actual senile states are reached, the person is prepared therefore.

Moreover, it must be impressed upon all patients that old age does not mean senility—that many persons of old age can continue effectively and happily and wisely, even though at a slower pace than in their youth. Properly guided, one does not need to fear old age. One can always be happy and can be constructive to the limits of his ability, no matter how that ability decreases.

Moreover, in their prophylactic measures, these patients need to change in orientation and attitude towards their children, wife, and business. So many of these persons, in the heyday of their life have been dominating and aggressive, have been accustomed to command, to direct, and to be listened to with respect. In the senile state, when the faculties are not so acute, and when neither the children nor business can any longer be dominated, patients become extremely annoyed and irritable and in many instances even paranoid. There is a loss of feeling of power, and the simultaneous awareness of decreasing activity injures the pride. It is therefore necessary to prepare the patient for this change in relationship, a change from domination and control, to one of suggestion and advice. The attitude must be altered so that the person no longer *expects* and certainly does not demand control of the situation. Such resignation is extremely difficult for most persons, and can be brought about only by repeated discussions, and only by substituting other interests which have little relation to the

children. Similarly in business, one should assume more and more of an advisory, and less and less of an active interest; it is surprising how younger men can "do as well, if not better"; and it is surprising how much more fun one can find in life when one has shifted some (but not all) responsibilities.

The physician here, as elsewhere, should do as much of an analysis and resynthesis of the patient's personality as is possible, with the particular object of removing emotional irritations and unstable tendencies. Such resynthesis can be made quite adequately for most normal persons who age, provided the tact and sensitivity of the physician enable him to establish a fairly complete rapport. As the patient ages, he tends, more and more, to become dependent upon and to be guided by the physician. Although the aged person is far from being a "child," he still has awareness of his own inadequacy and is greatly aided by the moral support of the physician. It is not uncommon for an aged person "unconsciously" to say to the physician, "But father," speaking as though he were a child, even though the physician may be half the age of the patient. The physician needs to be very tactful under such circumstances; for the resentment may be great if the patient even thinks that his physician is amused, scornful, or "patronizing."

Simultaneously, it is well to ask the members of the family to come to the office so that they may be instructed in how to guide themselves in relation to the patient. Too often the family has the idea that the aging patient is simply "mean" and "spiteful," and it becomes necessary to make the family understand the genesis of the "meanness" and the irritability, and to encourage them to special efforts in showing respect and courtesy to the patient. If the children are interested in the state of their aged parent, much can be done. Indeed, often the main direction of psychotherapy is towards the relatives in an effort to remove the emotional stimuli which irritate the patient, and to substitute other compensatory values.

The patient who is apprehensive must be continuously soothed and encouraged. Some persons are so timid as a result of lifelong habits that apprehensiveness is inevitable when their faculties are not quite at optimum efficiency. To these persons, explanations which dispel fears, and which encourage further activity are a vital force in their remaining well. The physician should spend enough time with such a patient to utilize this reassuring form of psychotherapy.

Generally speaking, it can be said that patients who are aged should remain in the environment and be permitted to carry out the habits to which they have been accustomed during their active life. It is of little value to attempt to change the aged person's mode of living, unless the patient is to be in a sanitarium or institution; because aged persons do not adjust so easily as do those who are younger. Routine methods which the patients use in dressing, in eating, in forms of entertainment should not be changed except for specific and unavoidable reasons.

In an effort to find interesting activities for these aged persons who for one reason or another are deprived of constructive work, one should encourage the cultivation of hobbies. There are many hobbies which the aged can undertake in proportion to their ability and their interests. A few common ones are: collections of stamps, coins, books, newspapers; gardening; games, such as checkers, chess; golf, and even tennis; carpentry, particularly wood carving, and reupholstering; study of natural phenomena, such as birds, trees, flowers; raising chickens or bees; study of books, and following radio courses; knitting, crocheting, rug-making.

One important element is the factor of sex activity. As a rule, sex relations occur two to three times a week between the ages of twenty and forty, decreasing to about once a month in the sixties. There are, of course, tremendous individual variations; and some males are still quite active at the age of sixty, while others have no sex interest at all. Women, on the other hand, while they too, as a rule, have a declining interest in sex with the passing of the years, not infrequently have an increase of sexual appetite when their fears over pregnancy are no long deterrent factors. For many an aging woman, the fact that the husband is no longer sexually active is disturbing, for it may have been his one concrete means of expressing his sentiment for her, and consequently the failure of this expression may indicate (particularly if she is emotionally unstable and immature) that her husband does not love her quite so much as formerly. In such women the sex desire becomes the stronger, the weaker the husband becomes; and occasionally the intense desire, if unsatisfied, becomes the basis for paranoid complaints by the woman, the primary delusion being that her husband is going out with other women. This increase in sex desire is a psychologic phenomenon. In males, too, there is not infrequently an increase in sex desire; but unfortunately this increase is also a psychologic one and is associated with a physical inadequacy. This

physiologic impotence may cause the male to turn to all manner of means to increase his potency (many charlatans thus make excellent incomes), or failing to do so directly, he attempts to satisfy his desire vicariously by sex play with others. Fearing his impotence will be found out by those who are sexually mature, and feeling that he can "get away with it" an unstable senile patient may expose himself to children, and manipulate their genitalia. In the more advanced senile states, these persons may expose themselves in a vague and confused attempt to express their sex drive. In many instances, the "cure" is brought about simply by placing the patient in an "old people's home." Punishment is not only futile; it is unjust and unnecessary.

Medical treatment of these patients is a bit different from the treatment of persons who are young. In general it may be said that the body reaction to disease is less intense, that fever is lower, that such illnesses as pneumonia may exist for a longer period without detection than in the same person twenty years younger. The dosage of medication is also different, smaller doses, as a rule, being equally effective, and, because of a decrease in the efficiency of cerebral circulation, toxic reactions to drugs occur more frequently. Finally, it must be emphasized that the principle of therapy of the aged is not to restore the tissues to the healthful state of a young person, but to restore them to a healthy "aged" state. Consequently, one does not force therapy as intensely as otherwise, and one must always be guided by realization of what recuperative powers are possible.

In the treatment of these patients, the physician should bear in mind the ever-present danger of hypostatic pneumonia, resulting from lying too long on one's back; the danger of failing circulation; the need to avoid adding any toxic drugs to the system; the necessity of keeping elimination functioning freely; and the value of a high vitamin diet. Often, it is better for a sick aged person to walk about rather than lie in bed because of the dangers associated with pulmonary congestion, with skin irritation and subsequent ulcer formation. Frequent gentle skin massage is of great value to the bed sick patient. Because of the dangers of falls and the ease of breaking the bones, these patients should live in homes with but a minimum of objects "to trip over," and they should avoid walking on icy streets. Anticipation of what "might happen" often adds years of useful life to these persons.

The psychiatric states which arise in association with senile

dementia call for special therapy. The patient who becomes "uncontrollable" in his usual environment, may act almost completely normal in an institution or rest home. The reason for this change in behavior lies in the fact that the emotion-producing situations of an accustomed environment are not present in an impartial but kindly home. Where there is an actual psychosis present, however, sanatorium care is advisable. Recent experimentation has shown that these aged persons can safely be given the electric shock therapy; and such therapy often removes quite well the symptoms of an agitated depression of a mild paranoid state. The dangers of fractures, or of cardiac failure seem to be at a minimum except where there is marked coronary sclerosis. It is sometimes amazing to note how well these aged persons respond to electric shock (convulsive) therapy (*q. v.*), both in terms of their physical stamina and in terms of their mental state. Patients with marked hypertension (over 190), and even patients with E.K.G. evidence of marked myocardial damage seem to respond to the convulsive therapy without irreversible results. Occasionally, after five or six convulsive treatments, these patients may show marked edema of the ankle; but this yields quickly to digitalis and to the discontinuance, temporarily, of the treatment. Not infrequently the memory is markedly impaired (pathologically, one should expect marked damage in an already "weakened" brain), but after a few weeks the memory seems to return to normal. Even in many instances where the writer feels there is much potential danger from this form of therapy, he feels that it is better to attempt therapy than permit the patient and his relatives to suffer without apparent hope of recovery. Of course, no therapy of this sort should ever be administered to the aged without a complete understanding by the patient and his relatives of the possible serious outcome. Psychotherapy should always accompany this treatment.

In many state hospitals there are aged persons who have been committed because of the difficulty the family has in caring for them. Many of these persons can still, under proper guidance, render a useful function in the community. Of special value are family care programs wherein such patients are placed in selected homes, where the patient can be visited at regular intervals by the state social worker and physician. Much of the overcrowding in our state hospitals can thus be avoided, and many of these patients can lead far happier lives.

THE PRESENILE PSYCHOSES

There are several different kinds of pathology which will bring on prematurely a senile-like psychosis. The usually described form has been termed *Alzheimer's disease*. The disease process begins in the early fifties, but cases have been reported at a much earlier age. The pathology is essentially the same as in the senile psychosis; although the one differentiating phenomenon, the Alzheimer plaques (composed of degenerated neurofibrilla, deteriorated cells which have silver staining particles, and which may agglutinate) may represent some differentiation from the senile plaques. The symptoms of Alzheimer's disease include a gradual onset with a failing memory; an impairment of the thinking process; increased emotional lability, often with worry as a major element. Physically the patient seems to age rapidly; he becomes dizzy and unsteady. Dysarthria, aphasia, tremor of the hands, and even convulsive attacks may be present in the later phases, symptoms which point to the site of pathologic changes within the brain. Hemiplegia is not uncommon. As a rule there is rapid intellectual deterioration, disorientation becomes marked, memory becomes almost completely lost, speech becomes senseless, and the terminal stage may be reached in two to four years. Again, there are many individual variations and some patients may live for twenty years after the onset. No demonstrable associated etiology has been established, although some studies show a strong hereditary predisposition. The treatment of such patients is primarily institutionalization and good nursing care.

Chronic progressive subcortical encephalopathy is a condition resulting from severe sclerosis of the subcortical blood vessels. The symptoms are similar to those of Alzheimer's disease and are the result of retrograde degeneration of the ganglion cells plus evidences of pyramidal tract involvement.

Pick's disease is the result of a relatively well circumscribed atrophy in one section of the brain, most commonly in the frontal lobes but also in other parts of the brain. The symptoms result from damage to the pathways involved in the degeneration plus the result of damage to the overlying cortex. Usually the symptoms are those of a slowly developing presenile dementia plus hemiplegic signs should the lesion involve the pyramidal tracts. No treatment other than nursing care is known.

Schilder's disease (encephalitis periaxialis diffusa) is the result of degeneration within the white matter of the brain. Probably

several different kinds of conditions are involved under this one title. Often the illness has its onset in children, more often in males; and the course is rapid, fatal outcomes occurring in several months. The symptoms result from the dysfunction of the part of the cortex which has been cut off by the underlying destruction. A most frequent symptom is cerebral blindness, wherein the optic pathways are normal but the patient cannot "see"; for the visual cortex does not receive any visual stimuli. Intellectual deterioration is rapid, so much so that coma frequently supervenes. There is no known treatment.

Cerebral arteriosclerosis is a common source of intellectual deterioration in old age. The pathology is, of course, the destruction of brain areas by virtue of a progressive anemia. When thrombi or hemorrhages occur in the cerebral vessels, convulsions or hemiplegia will result. The illness has an onset about a decade before senile dementia, but its course is essentially the same as in senile dementia. Indeed, much of the aging of the ganglion cells in senility may be hastened by the anemia produced by the narrowed blood vessels. The symptoms tend to vary more in this condition than they do in senile dementia; for the alteration in blood pressure may decrease or increase the cerebral flow so as to improve or intensify the anemic state, with the consequent effect upon the intellectual function. Otherwise, except for the greater frequency of neurologic signs secondary to hemorrhage and thrombosis, the illness follows the same course as does senile dementia. The treatment of the two conditions is similar, though in cerebral arteriosclerotic dementia more emphasis is to be placed on the cardiovascular system.

PSYCHOSES OF TRAUMATIC ORIGIN

In view of the tremendous number of automobile accidents in the United States, and of the fact that over 1,000,000 persons are injured annually, and that of this number 30,000 are killed, and that of those killed 60 per cent died of brain injury: in view of these facts it is surprising how small a number of persons ever enter state institutions because of psychoses due to trauma. The reason for this smallness in number lies in the basic principle of organic psychoses; namely, that the trauma rarely is diffuse enough, and rarely includes enough of the cortex to bring about a psychosis. When trauma occurs to the head the brain may be thrown against one side and damaged even without any damage to the skull, very

much as one can break an egg in a wooden box without cracking the box. This laceration of the brain (contrecoup) on the side opposite the injury is, however, but a small part of the damage done, and usually does not involve very much of the cortex. The major injury results from a marked spasm of the arterioles, followed by stasis and marked dilatation of the veins and distention of the capillaries. Extravasations of red blood cells occur, multiple small petechial hemorrhages are present, the brain becomes markedly edematous, ganglion cells are swollen and show Nissl changes, and many of these cells die as a result of the trauma. If the trauma is severe enough large subdural hemorrhages or hemorrhages elsewhere may occur. A depressed skull fracture may produce damage to the brain tissue immediately beneath the trauma.

In consequence of the lack of damage to widespread areas of the cortex, relatively few psychotic symptoms are produced. Those which do occur may show the physical symptoms of neurologic damage, together with dizziness, especially on stooping; headaches; vertigo; nystagmus, and signs of pyramidal tract involvement. Not infrequently epileptic attacks follow injury, should the motor area of the cortex or the pyramidal pathways be injured. The intellectual symptoms are those of loss of memory, or orientation, and other topics of the mental status. The amount of intellectual damage is dependent upon the amount of brain injury. The psychiatric state, colored by the above two factors, may fall into any one of the usual categories: manic, depressive, schizophrenic. These states need to be treated in an institution. As a rule there is a great deal of uncontrollable temper because of the lack of cortical substance and cortical control. After the acute phase has subsided, these persons can often be taught to control their emotional state and to live within their limitations. Psychotherapy is of great value, inasmuch as the cortical damage is rarely progressive, and what is learned by the patient remains with him.

On the other hand, so-called traumatic neuroses are not true neuroses but are symptoms of the impaired functioning of the brain. The symptoms are usually those of easy fatigue, dizziness, vertigo, inability to control one's emotions, irritability, crying spells, headaches, inability to concentrate and localize pains about the head. Penfield believes that many of these symptoms result from dural adhesions, though there are some instances of chronic subdural hematomas existing for years. Most of the

symptoms are the result of multiple petechial hemorrhages throughout the brain, together with laceration of brain tissue, and destruction of ganglion cells. The most important therapy for the traumatic states is the finding of work which does not require too much physical effort and the readjusting of the patient to a life of fewer responsibilities and fewer demands. One can utilize Penfield's operation of breaking up adhesions between the dura and the brain by instillation of air into the ventricles by the usual method of encephalography, the theory being that the shrinking brain will tear away the adhesions. Or one can determine by this encephalography what damage there may be which will warrant surgical interference.

The persistent headaches in these instances are difficult to deal with. Often bromides and phenobarbital will aid. A favorite prescription for these headaches, one which I find of great aid, is the combination of codeine and aspirin.

PSYCHOSES RESULTING FROM CEREBRAL NEOPLASMS

Psychoses, as such, are rare from cerebral neoplasms, because the tumor is frequently localized and does not involve the brain diffusely. Where, however, the tumor is large in size, or where the subsequent increase in intracranial pressure is great enough to disturb the activity of the cortex, or where there is interference with cerebral circulation, then psychotic symptoms may result. The therapy of these patients is directed primarily toward the etiologic factor; that is, the removal of the tumor. Such psychotic symptoms as do arise follow the pattern of acute delirium,¹ or the pattern of the other more chronic Organic Psychoses.

The treatment of patients who have inoperable brain tumors will depend in large part upon the amount of incapacitation resulting from brain damage. If the patient is aphasic, hemiplegic or demented by a growing tumor which will eventually end fatally, there is little that one can do. One should endeavor to make the patient as happy as possible and the family's aid should be enlisted. Morphine should be used freely to mitigate any pain, and good nursing care provided. Sedatives for sleep, a light but well-balanced diet, and care for eliminatory functions will help. When the patient becomes too much of a nursing or other problem, one should advise institutional care, either in a good private nursing home, or in a public institution. Frequently it is better to

¹ *Vide* delirium p. 379.

transfer the patient to an institution early; for the emotional disturbance created in the other members of the family by the slowly progressing illness which cannot be helped, may in the total situation, be unwarranted.

When the patient has an operable brain tumor, and is left with functions almost completely intact (as when the frontal lobes are removed), or should there be physical defects such as aphasia, hemiplegia, ocular palsies, etc., one should evaluate what the patient's capacity for life is. Such evaluation should not be done lightly. One needs to estimate the amount of residual intellectual ability so that one can advise on the patient's place in his occupation or business. One needs to evaluate the emotional stability of the patient, in addition to the emotional factors in his environment so that one can better advise the patient and his relatives on his future occupation and course in life. One needs to evaluate the amount of incapacity resulting from the aphasia, hemiplegia, or other neurologic symptom so that one can prescribe appropriate physical, medical, and training procedures.

After such an evaluation, it is important to discuss the problem directly with the patient, and help him accept his new level of existence. An enterprising business man whose right frontal lobe has been removed, leaving him with a residual hemiplegia, will not resign himself easily to a life of inactivity; and it is important not only that he enter into as much activity as permitted by his incapacity, but also that he understand that he must make an *emotional* adjustment to this incapacity. It is of great value for the patient to understand the "chances" of his having a recurrence, and the "chances" of his future physical and mental health. Under such guidance, the patient may still play a useful role in society, and not be an unhappy person. Whenever possible, patients should be encouraged and aided in contributing to society to the utmost of their efforts. Incapacitated patients will be far more happy, and far less "neurotic" under a reduced work régime than in an idle, useless, and hopeless state.

CHAPTER XVII

THE CONSTITUTIONAL PSYCHOSES

THE psychoses, manic-depressive and schizophrenic, which comprise over 50 per cent of the resident population now in our state hospitals, cannot be differentiated as a group from the neuroses, but must be differentiated according to the specific type of psychosis. Despite the many theories current as to the etiology of these psychoses there is no one generally acceptable. The wide range of etiologies, from the organicist who finds a "destruction of the ganglion cells in the third layer of the cortex" to the psychoanalyst who insists that schizophrenias result from "a homosexual anal erotic" type of personality, indicates the confusion which exists. Nevertheless, those who are familiar with the innumerable case histories of these patients are impressed with the fact that there is neither any consistent physical etiology nor any consistent psychologic etiology which could not similarly apply to persons who do not become ill. The clinical impression which the author has is that these "mental" diseases are the result primarily of *constitutional inadequacies*, and that these inadequacies seem to be bound up in some way with the type of physique and with the prepsychotic personality. To the author, it appears that both of these psychoses, the manic-depressive and the schizophrenic, are the result of some inherent defect in the structure of the nervous system and in those elements which maintain its normal metabolism; and that superimposed on this fundamental weakness are disturbances in development which often follow puberty. Psychoses do occur in childhood but are relatively rare.

In any case, there is in the average patient suffering from these two psychoses no "organic disease process" which has been discovered to serve as a basis for treatment; and in only the exceptional or mild patient does any form of psychotherapy bring about "cures." It was not until the recent advent of the "shock" therapies that any consistent help was available for these patients.

MANIC-DEPRESSIVE PSYCHOSIS

Manic-depressive psychoses are *physiologic* illnesses characterized by swings in mood, alteration in activity, and change in the tempo of thought and speech.¹ In the manic phase, these

¹ *Vide* p. 287.

changes are accelerated and elevated; in the depressive state, these personality alterations are decreased and depressed. This illness has, however, several variations of the basic pattern.

Most of what is written about this condition is based on studies of patients who have become ill enough to be committed to an institution, and there is a dearth of information about the vast group who never need to enter a psychiatric institution. Any age group may be involved, the peak age being between thirty-five and forty. The type of physique often found is the pyknic;¹ that is, those persons who tend to have round faces, narrow shoulders but thorax sloping outward, a round abdomen, well padded limbs, little hair on top of the head (there may be much hair before thirty, but baldness comes early to these persons), heavy hair on the chin and chest, and a personality which is aggressive, persevering, and more inclined toward sociability than seclusiveness. The illness usually varies from the manic form to the depressive and *vice versa*. Attacks tend to recur; but more than one-half of these patients have only one attack, and one-quarter, two attacks. (Pollock reviewing the patients admitted to the New York State hospitals in ten years gives the following percentages for women: One attack, 57.8 per cent; two attacks, 23.8 per cent; three attacks, 9.7 per cent; four attacks, 4.2 per cent; five attacks, 2.1 per cent; more than five attacks, 2.4 per cent. The males have approximately the same percentages.) Spontaneous recovery is common, the usual duration of the illness being from six months to eighteen months; but there are many variations and exceptions. The most common cause of death in these patients is disease of the cardio-vascular-renal system, in contrast to schizophrenia where the most common cause of death is tuberculosis. These facts, as well as others, indicate the constitutional predisposition.²

There are, however, many patients who suffer from mild manic-depressive swings and do not come to institutionalization. These persons may suffer from the intrinsic symptoms of the disease and are said to be temperamental; or quite commonly they suffer from what appears to be a neurosis,³ but is primarily a mild depressive state associated with psychogenic or physical disturbance. These patients also are depressed, fatigued, cannot concentrate well, "feel inferior," etc. It is difficult in any particular case, to determine how much is true depression and how much is the result of psychologic influence. Moreover, in many "normal" persons

¹ *Vide* p. 286.

² *Vide* p. 24.

³ *Vide* p. 281.

there is a definite tendency to moods which last over long periods of time, and which come on spontaneously.

The cause of manic-depressive swings is unknown. Some correlations to physique and temperament, have already been mentioned. There is a strong familial and hereditary influence, but exact figures are difficult to ascertain. The "exhaustion" states which follow shock, operative procedures, or long illnesses, simulate depressive swings; but rarely are they other than precipitating in character. Care must be taken not to confuse with the etiologic factors those physical complaints which are merely coincidental with the depression. Pregnancy is not infrequently followed by a depressive period in which anxiety is a prominent symptom, but any other type of psychosis may also occur. Psychologic stress or strain may often be influential in facilitating a manic-depressive illness, but it is very rarely "causative." Environmental stresses may bring about temporary sadness, and irritability; but in themselves they cannot cause the patient to develop the symptoms so characteristic of this type of illness: the tremendous suicidal drive, the inability to think about subjects not involving self, the inability to forget their "troubles" for a while and laugh. Moreover, psychologic factors may continue in operation and the manic-depressive patient may make a complete recovery in spite of their continued existence, a fact strongly indicative of the *relative* unimportance of the disturbing circumstance. In general it may be said that the depressive illness will develop and will disappear, in spite of the emotional strain in the environment; though the depression may be prolonged or initiated by outward irritations.

*These personality changes and the "mental" attitude are not psychologically determined, but result from physiologic changes.*¹ Ideas and moods may be inculcated by training and stimuli, but their direction, facility and tempo are overwhelmingly influenced by the activity of the physical organism. Just where the seat of the physical disturbance exists, is as yet unknown, but that it does exist and disturb "mental" reactions, is clinically unquestionable. In this illness, particularly, is it brought home to us that "mind" is but one aspect of "body."²

Mrs. K. H., aged twenty-nine years, complained, "I'm not able 'to make myself do things.'" She felt fatigued, discouraged, cried "for no reason at all," slept poorly, and could not concentrate. She insisted that she was "going crazy" and she had had many medicines, injections of all sorts, and had been to a sanitarium where the "head doctor called me a fool." Her

¹ Vide p. 404.

² Vide p. 45.

illness began, she said, six months before when she moved to a new apartment and for the first time furnished her home with her own furniture. She noticed that the Venetian blinds were always dirty and she cleaned and cleaned them, but dirt kept accumulating. She began to cry because "she couldn't keep them clean" and "the last thing she thought of on going to bed and the first thing she thought of on arising was those dirty Venetian blinds." Her husband tried to persuade her that such a trivial defect meant nothing, and that worry over it was of little use, but to no avail. The patient became worse, more and more depressed, and finally attempted suicide.

The "dirty Venetian blinds" was given as a cause of the depression; yet obviously such an incidental factor could not cause a deep-seated depression which eventuated in an attempt at suicide. When her history was studied further, it was found that she had gradually been less and less active, that she had become increasingly fatigued, and that she did not enjoy the company of friends as she formerly had. There were many other incidents to substantiate the fact that her depression had been coming on for a few months before the furnishing of the apartment; and the dirtiness of the Venetian blinds merely served as a focal point of irritation through which she could express all her depressive tendencies. Finally, in an effort to satisfy his wife, her husband sold all the furniture and moved to a new apartment; but she continued in her depression until metrazol therapy was instituted. She recovered almost completely in a month.

The *manic phase* may develop under similar circumstances, with or without apparent stress. Not infrequently the manic phase begins suddenly, yet on closer examination, the physician discovers a preliminary phase of depression and a period of overactivity which was not excessive and so passed unnoticed. In many patients, the manic phase does not reach the wild state of excitement, and so the patient is spoken of as being in the hypomanic phase. This condition, however, is but a milder degree of the other.

The *hypomanic phase* is characterized by a marked feeling of well being and increased activity. The patient awakens bright and cheerful, eats very well, sings, and in other ways manifests his subjective well being. He talks a great deal, jumps from idea to idea, and makes many clever and witty remarks. He is active and forceful, often accomplishing a great deal during the day. If the degree of hypomanic activity is not so excessive as to be self-defeating, these persons may become very successful in business because of the pressure of their ideas and their energy.

Miss V. V., aged twenty-seven years, was a quiet pleasant young woman who appeared to be a quite well integrated person. She lived in a small town, working as a stenographer and living a seemingly uneventful life. In March of 1936 she became restless and talked far more than she formerly had. She became interested in societies and did a great deal of committee work, so that from a shy and relatively unknown girl, she seemed overnight to blossom forth in the role of a leader. Her parents remarked that she had never looked better in her life. She did not go to sleep until late; yet somehow had such a boundless store of energy that she never seemed to tire out. She became somewhat argumentative, however, and left the family home to live in Chicago with a relative. In Chicago, she soon entered into the spirit of the community and was the "life of every party." She had excellent background and appearance; so she easily procured a position selling season tickets for the opera. Her sales record was phenomenal, for she sold more tickets than any other of the personnel, some of whom had had extensive selling experience. She talked rapidly, vivaciously, and was always laughing. She was witty and charming. In September of the same year she began to have conflicts with her fellow employees. She became too vivacious and her speech seemed almost nonsensical. She could never finish a story, but jumped from idea to idea with lightning rapidity. She began to call up prospective clients in the middle of the night, ran up large taxi bills, gave elaborate parties which were expensive far beyond her means. Her overactivity finally became so great that she had to be placed in an institution. She recovered some eight months later and was well enough to go home. At the time of discharge, she was quiet, pleasant, interesting, an entirely different person from the one she had been in the previous year.

This girl had a typical hypomanic attack, which began in March and culminated late that year in acute excitement. But it will be noted that early in the attack she appeared to the casual observer to be merely an active, vivacious girl; and in fact *she was hypomanic only in relation to her accustomed and usual behavior*.¹ There are many persons who are "normally" as constantly active as Miss V. V. was in her illness, although when their behavior becomes extreme, even these persons may be termed hypomanic personalities.

The *manic phase* is but an intensification of the symptoms described. The patient is bright and cheerful to the point of euphoria; everything seems possible to him and there are few if any things which he is not confident that he can accomplish. Far from feeling inferior, he has the extremely rare "superiority complex" (a term usually misused to describe a compensated inferiority state). His thoughts come so quickly that he may not be able to express all of them, and what he says often sounds confused ("flight of ideas"). His activity may be so great that he cannot be managed in ordinary

¹ *Vide p. 285.*

surroundings. This manic state of constant acute excitement as a rule is self-limiting, spontaneous remission occurring within from six months to a year. The remission may be a return to normal behavior or it may be the beginning of a typical depression. The frequently characteristic alternation between manic and depressive phases was the basis for the old term of "circular insanity."

The depressive state varies considerably, both in intensity and etiology. A person may be depressed as the result of two general forces, or a combination of these two. The first type of depression has its origin in purely psychologic factors and cannot properly be said to be of the manic-depressive group; the second, in physiologic mood swings.

The first type of depression (i. e., one due primarily to psychologic stress) occurs in the setting of a normal level of mood. The stress may be an obvious and overt one¹ such as a sudden loss of financial security, the death of a parent or child, an intense domestic disturbance, etc.; or it may be a chronic, obscure, constant even though not intense type of stress,² such as concern over possible loss of a position, brooding over some "wrong" committed or suffered, or any chronic emotional instability such as have been discussed in earlier chapters. As a result of these situational or psychologic factors, the person "feels" blue and depressed; he is constantly concerned over the situation which precipitated his depression; he manifests his irritability by a psychoneurosis, emotional outbursts, or weeping. He may sleep well or poorly, but the difficulty in sleep usually consists of a difficulty in falling to sleep, in contradistinction to the physiologic manic-depressive who usually awakens early but falls asleep quickly (not true if the depression is accompanied by psychoneurotic features). The psychologic depression is usually of short duration, lasting several days or weeks; and its intensity does not remove the possibility of the person's laughing, if the stimulus is strong enough to make him forget. There is little sense of personal inadequacy, but rather a feeling of sorrow or anxiety over any difficulty. This characteristic attitude is modified in persons who have had a psychoneurotic tendency; for in such persons, the occurrence of a depressive state, psychologic or physiologic, is associated with an intensification of their neurotic symptoms. Moreover, in the depressions produced by a chronic and subtle stress, the symptoms have much more of a tendency to be associated with anxiety and apprehension³ rather than simply the feeling of being "blue" or "low." The simple

¹ *Vide* p. 159.

² *Vide* p. 146 (Case S. D.).

³ *Vide* p. 248.

feeling of hopelessness is complicated and intensified by deep concern and agitation. Many such persons will feel guilty if they have momentary moods of detachment or pleasure, being convinced that they have no "right to happiness" and "ought to be sad." Psychotherapy and diversion is a good and relatively simple cure for such psychologic depressions.

Mrs. C. C., aged twenty-nine years, was eager to have a child. She had been married to a University instructor for eleven years and though her time was well and happily occupied, she longed for the time to come when they could afford to have children. Finally she became pregnant and she prepared for the child's coming with tremendous emotional enthusiasm. She told all her friends, talked constantly about what she would do, bought clothes enough to provide for two or three children, and was supremely happy. Everything progressed well until the time set for delivery, but the child was not born till three weeks later. It was a still birth. The patient cried for several days. She did not sleep, ate very little, and remained in bed. She continued in this condition for about a month, and then decided to adopt a child. She did so two weeks later and was then content, happy, and interested in the new child, apparently having given up grieving over the death of her own child.

On the other hand, the *physiologic depression* occurs without apparent cause, or with a trivial and inconsequential cause. On many occasions the cause seems sufficient, yet is only incidental; for when the physician examines the past life of these patients he will find that there have been many stresses which though they were far worse than the immediate one were not attended by any depression. Occasionally, one finds the most recent stress to be "the straw that broke the camel's back," and the "final blow" not to be endured. There are always other and unmistakable signs in a true physiologic depression.

The signs and symptoms of this type of depression manifests themselves as a rule very gradually. At first there is a quietness of manner and the customary loquaciousness disappears. Fatigue sets in easily, and even after much sleeping and little work the person complains of being tired. The appearance of the person suffers, and the fastidiousness of which he may have been proud disappears. Although he may berate himself for this deficiency, he does nothing to overcome it. The expression changes, and instead of the usual alert look, there is the appearance of tiredness and disinterestedness. The facial muscles lose their mobility, becoming relaxed and smooth, except possibly for the frontal muscles which may be corrugated in apprehension. Various gastro-

intestinal complaints¹ come to the fore: there is no appetite, constipation is common, and the patient loses weight. Sexual desire diminishes gradually so that intercourse may not occur for months. Sleep becomes poor, and characterized by constant distressing dreams. Recognition, approval and achievements give the patient no satisfaction, and "all the kick seems to go out of life." Small problems suddenly loom large and there is constant worry over innumerable small details. Friends become uninteresting, and the patient visits others less and less, eventually finding it very uncomfortable to be in the presence of others.² The future is regarded very pessimistically as are also the present and the past. Concentration becomes difficult, and the person finds it arduous to read even the daily newspapers. The memory seems poorer, and the patient forgets where he left items, and what he was supposed to do. When actually tested however, the patient on effort, demonstrates an excellent memory; so that it becomes apparent that the defect lies in the fact that the patient so concentrates on and remembers his problems and difficulties that insufficient attention is given to everyday incidents. In actuality, the problem is not one of memory but of attention, and it is extremely difficult to force concentration.

As the depression increases in intensity, suicidal thoughts appear. The patient says he cannot "feel" anything; that emotions do not have the same meaning for him as they do for others. For example, mothers complain sadly of their inability to take "proper" care of their children, insisting that they seem to have no "feeling" for their children, and that it seems to make no difference what happens to them. In the very moment of self-rebuke for having "no feeling" such mothers express great concern over this inability. Often the state of disturbed sensation is so intense, that patients actually welcome a physically painful sensation because of its contrast to the more disturbing peculiar "mental" state they are in. They find it extremely difficult to describe their state of "feeling." There are rarely any disturbed physical sensations as we ordinarily think of them; occasionally there is a "tingling" in the arms and legs, or shooting pains and twitches, but these are not common. Thermal intolerance is frequently found, for some poorly understood reason. Many of these patients complain of having an intense unrest after entering a restaurant.

The gradual disappearance of this condition is comparable to its gradual appearance. From onset to end, the average physiologic

¹ *Vide* p. 304.

² *Vide* p. 72.

depression lasts about a year and a half. Here again there are marked variations so that depressive attacks may last from three months to an indefinite number of years. Often too, the depression is measured by the patient only in terms of the period of intense depression, without cognizance of the less distressing prodromal and convalescent features. Moreover, during this period, it is almost impossible to "cheer the patient up." Indeed happy music, gay parties even brilliant sunshine are depressing to these patients in contrast to the psychologic depression.¹ These patients, depressed as they are, compare themselves to the stimulating environment and become increasingly depressed because they "know they should enjoy the situation" but cannot. The efforts of friends to cheer up the patient are generally more detrimental than beneficial.

Many persons are driven to suicide, when they are nagged to "snap out of it," or to "use some will power." These patients, often incapable of doing what is asked of them, criticize themselves far more acutely than do others; and when the criticism of others is added to their own self-criticism, they become desperate, feeling that they have no one to turn to for some moral support. It is therapeutically unwise to criticize these patients;² though, as we shall see when therapy is discussed, a certain amount of urging is of value. It is important to understand that this type of depression is beyond the "will" of the patient to control.

Mrs. K. H.,³ mentioned above, wrote the following history of her illness after her recovery, and extended quotations are given from it because it describes quite well the usual emotional status of patients in depression. The incidents she refers to in Wyoming have not been quoted in full, but she and her husband experienced many severe hardships both because of his small salary, and the fact that he was stationed at a railroad terminal where the housing consisted of a small shack which could not be properly heated during the intense cold weather, where the toilet was an outhouse some distance from the shack, and where the water had to be pumped from a well that was frequently frozen. Her account of the illness is as follows:

"We were so happy buying the Hoover, the desk and various other things. Then I started to go 'nuts.' We had lived so long the other way that it was hard to change. We were on our own—had to pay the gas and light and furnish the laundry. I got tight with the linens and worried about the gas and light bills, even made Tom turn off all the lights in the living room when

¹ *Vide* p. 253.

² *Vide* p. 133.

³ *Vide* p. 400.

he came out to eat. It had been so very dirty at the Gothic, I didn't think it was going to be dirty over there but it was. The heat wasn't so good all the time and I nearly drove myself wild running the Hoover every day and dusting those Venetian blinds. They were ivory color and the glare from them hurt my eyes and I felt just like I was in a cage all the time. One thing that drove me wild was the fact that some of my old pieces of lace, dishes, pictures and odds and ends that I had cherished so much couldn't be used because they didn't fit in with the modernistic. I would hunt in the store for various things—I had ideas of what I wanted but the salespeople said it just couldn't be used. The curtain man came out and said my ideas were all wrong but I see some of them in the paper lately. Then I was so lonesome. There was no woman neighbor across and being there alone all day—sometimes several days at a time seemed to get on my nerves. Tom had lint all over him all the time and my coat had lint on it—lint—lint—everyplace—from a new rug, the laundry, and the bedspread. I thought I would lose my mind and yet millions of others go through that same thing all the time. When I look back at it now I wonder whatever was wrong with me. We had some friends in and they raved about the place but the compliments didn't thrill me. All of our furniture was heavy—not as nice as the traditional modern is now but still I can't forget it. Early in December I had gone out to Wyoming to get our things that were in storage (odds and ends) and to repack them. I was disappointed for they had been stored free in the freight depot so we had no kick coming, but over half the dishes and kettles had been stolen, and the pack rats had gotten into other things—it was a mess. We had to throw away a lot of things even after they got here. I nearly lost my mind trying to find some modern dishes to go with the blue chairs and couldn't get the drapes I wanted for the dinette nor the tie backs for the bedroom. It was just everything like that that got on my nerves. One Saturday night I spent four hours scraping paint off the bathroom when we should have been out having a good time. Little specks of paint were splattered all over everything. The apartment hadn't been cleaned well, but decorated and I had so much to clean up after the other tenants. The transom was filthy and even then big hunks of soot would fall down in the kitchen. I had never had to worry about window washing but had to attend to that there. The high third floor nearly wore me out. I just worried about everything and picked on everything until I nearly had Tom a nervous wreck. We had fourteen months lease with a thirty day transfer (business clause). We had gotten friendly with the janitor and given him a couple of drinks but he was the kind that did things when and how he wanted to so we had to be careful with him. I didn't like the way the window sills were done so made the decorators come back and sand them and do them over. That was a mess. I didn't cook much, tried to save on the gas—tried to keep the laundry bills down and then when it did come back it had lint all over it. Then Tom's mother came and she is a darling soul and I love her—before that I was getting so I couldn't sleep and one morning either late in January or early in February I woke up with a snap in my head and my first thought was—I wonder if I can get the Venetian blind up and jump out of the window before Tom wakes up but instead I got up—it went on for at least a month or more—I only slept two hours a night, would get up at 5 A.M., pace the floor in the cold and smoke six or seven cigarettes

before Tom would get up for breakfast. Then I got so I couldn't eat—I had that big lump in my throat. His mother came and was here about ten days I guess and she was company for me but I would sit around or lie on the sofa and cry and shake. I had needle points all over my body, especially my arms and legs. We went in the car with Tom on trips to Indiana, and I would crawl up in the back seat and shake the entire time and never talk, if I did it would be about how terrible I felt. I began to lose weight and have dysentery. My friends kept telling me to snap out of it—that housekeeping couldn't be that bad but I wanted to go back to the apartment hotel, where there were people that I knew, where I could be free with the lights and gas, visit with the maid and not have to worry about things so. Tom was so worried—we had to get out of that lease. I either went with him on trips, because he was afraid to leave me alone or I would go spent the day with friends, curled up in a chair raving about my tale of woe. I feel so cheap now it is hard to face those friends. I started going to Dr. D.—— up north and he gave me theelin shots. They helped some. I also took Progynon for hot flashes. After making a fool of myself and running every prospective renter to death, we finally rented the apartment and got out of the lease. Also sold the furniture for half price. Sold the blinds with the apartment. I packed up and I'll never forget the look on Tom's face when he came home and saw those packing boxes all set and ready to go. I was so mean and insistent. I found that the only apartment vacant over here was a large three room at too much rent but I wouldn't stay over there another day and so we 'snuck' out over there without anyone seeing us (the janitor) because we were supposed to be transferred, so we moved three weeks before we should have and paid double rent for that time. Tom wanted to put the furniture in storage but I wouldn't hear of it. I wanted it sold and gone off my mind. We had to go over there every Sunday until the last for the people to look at the furniture and they took a few small things with them. The last Sunday they brought friends and went out and got beer and made a party out of it. That nearly killed me. By that time I was sick of my change but it was too late and I thought after all of it was gone that I would feel differently. Mary went with me in the morning for them to take the last of the furniture and I couldn't describe to you how I felt that day. My heart was breaking. I was crying and every nerve and muscle in my body seemed so tight and such a pull on them I thought they would snap. It was awful. Prior to that time I had made several trips with Tom and he took me to a little night club. Thought the change would do me good. The first time I rather enjoyed it and ate a pretty good dinner but I was a wreck the next day from the drinks and the second time it was a flop. I climbed up on the window sill and nearly jumped from the hotel window. By that time those ideas were forming for it all seemed so useless and hopeless. No one, nor I, could see why I had to give up like that when I went through so much those two winters in Wyoming.

"I knew the apartment we selected had nice possibilities for normal people but I was so afraid of myself and the future—afraid I couldn't swing it and be happy and contented again and feel like life was worth while. The days went much easier and I could stand my own company but I still didn't care about being with people but had to several times and got by pretty well. This new apartment had light, traditional modern furniture and I wondered

how I would react to it. We could change any time we wanted but here I felt somewhat ashamed of the small place and of what I've done. We had to live some place and it was only a six month lease there. Sometimes I thought I'd wind up in an asylum—I didn't feel sure of myself and I got those wild ideas, but they weren't so hard to control. My face still felt a little tense and I had lots of internal nervousness at times although externally I didn't think it showed much. The sex was at a very low ebb—I couldn't get satisfaction but I was getting a little more feeling than I had had for months. My memory was bad. I cried quite a bit yet and had a tendency to do that more when my husband was around or when he got affectionate. I felt so sorry for him to think he had gotten such a rotten deal. I knew he took me for better or worse and he got the worse. I told him several times that if he wanted to get rid of me it would be okeh but that just hurt him. "I did not cook much but he complimented me on my meals. I thought he just was trying to make me feel good and cheer me up. I did not do much around there—kept saying I'd shop more and do better when we get settled in the other place and yet I wondered if I was only alibiing to myself or if I really would. I was not making any plans very far ahead—I seemed to be afraid to. I thought I would never get through those weeks but I did and it wasn't so bad, however, I spent much time job hunting and apartment hunting. That at least gets me out and I talked to strangers. I could bluff my way through.

"I had no particular interest in anything, was not interested in Tom's work, nor clothes, nor movies—I just felt like I was here from day to day, not sure of tomorrow or the future. I used to plan ahead for trips, etc., and when I would buy clothes, how it should wear and what could be done with it to alter it the next season. I didn't need so very many clothes but it was a good thing I had a few things to wear or I don't know what I would have done, for I hadn't the desire nor energy to go out and buy them. I claimed that I didn't want any more junk to move than we had. And that another thing—I just felt that I couldn't make this move—I must get out of there. I felt so cheap and hated to go by the desk and see the maid and other help, yet I didn't feel equal to getting things organized like I'd always done before so Tom and my brother promised to take charge of the moving and I could do anything I liked for the day or go over to the other place and be the 'receiving' clerk. I wondered if I wouldn't be prone to worry if I weren't on the job. That was being lazy I guess but I just didn't feel capable. We had moved so much that year I didn't know what we had. I was going to have to get over being sentimental about old things that don't fit in with modern furniture.

"I got these weepy spells every once in awhile and got so blue. I thought that I had brought this all on myself—it was just because I was selfish, self-centered, and a coward, and I allowed myself to wallow in self-pity. I cut many articles out of the papers that upset me, yet thought of saving them for a scrap book but I wondered if that would be wise. Everything like that I took to heart and decided it was meant definitely for me.

"I knew I had to live—first because God put me on this earth for a reason and I had to stay until he took me, yet I had to feel like I was earning my way and making something of my life. Did I have a right to happiness after what I had done? Or was this a punishment for something I'd done

that was wrong? Others had had far worse misfortunes than that and come through okeh—I felt that I brought all that on myself—I felt so guilty, so wrong, so unfair. Our Wyoming hardship hadn't been my fault, perhaps that was why I could take it. Why did I feel so cheap and ashamed to face my friends. I wouldn't see some that were very kind to me on 25th street. Was I a coward, was it jealousy, what was it? I wondered if I could walk back into that 25th Street apartment with just the same furniture, everything the same as we had it, take off my wraps—would I be able to pick up where I had left off and start on again? It was too big a gamble to take a chance.

"I felt as though I had no right to plan anything and I could give suggestions and state ideas and opinions before—now I felt I had no right to and didn't seem to know them. I couldn't remember how to cook certain things. I was not interested in new recipes or ideas or things for the apartment. I didn't read much—no magazines and just the daily papers because I couldn't concentrate and couldn't remember. So many things came up that had happened the past summer and before too, that I didn't remember a thing about. My main answer to questions was 'I don't know' or 'I don't remember.' Casual little things didn't interest me like they used to, nor did people, clothes, just everything.

"After we got here at 9265 Woodward again, it wasn't like I thought it would be. I quit talking to anyone—wouldn't talk to the maids, especially Rose, nor the manager, wouldn't go back to any of the stores that had known me before and wouldn't see many of my friends. I went home late in April and was so depressed while there I couldn't talk to anyone—very little to my family and practically none to my friends. Whereas, I used to love to dress up and go up town and see the old friends, I wouldn't go up town and hated to go to the little church for fear someone would say something to me or notice the change. I wouldn't go to see Tom's brother and family who only lived 21 miles west and I had always enjoyed my day's visit there. I had always been one who liked to dress up, or rather clean up—made it a point to have a bath every day and have something besides an apron on when Tom came home for dinner but during that bad spell on 25th Street I went a week at a time without a bath—wore the same old dress until it nearly rotted off of me and now Margaret says I used to twitch but I don't remember that. I do know that then (and even yet) I often shake my head for it sort of seems to clear it. Another thing that worried me was that I fell out with Margaret and Joe in the Fall. Joe lost his job and I got mad at her (I don't know why now) and never called her until one day when I felt so bad and begged her to come over, which she did, and was very pleasant about it—she didn't know about our move—she has been very nice to me since.

"Dr. B. seemed to think it was OK for us to move back to the hotel, thought it might help me but yet thought I was very foolish. He said I had a premature menopause. He suggested that I go to Milwaukee and my doctor brother suggested that I see a competent neurologist, who was also a psychiatrist. Dr. B. said I would get all those things in Milwaukee. I could hardly keep alive on that trip to North Platte and while I was there Tom attended the Golden Spike Days in Omaha and they had a similar parade in North Platte. I cried my eyes out when I saw the old railroad

couples for I knew Tom and I would never be like that. I had a sample of six sleeping capsules that the doctor had given me but I hadn't used them. I was eating a little better and sleeping a little better by that time but my jaws were so stiff and compressed I could hardly open them and a smile was a rare thing. My folks just couldn't understand what happened to me and why we sold our things. When I told my mother goodbye, I didn't think I would ever see her again.

"(Another thing, while Tom's mother was there on 25th Street, we had that terrible snow storm and nearly froze in the apartment, and they decided to take up the hall rugs and do the halls—that made dirt and cold air in the apartment and we had to use the dirty back way and she is so stiff she could hardly make the steep stairs—those things got on my nerves too.) (I was so afraid there would get a scratch on the furniture—had always been careful with other's things, and yet didn't worry about them.)

"Around Decoration Day, I entered the ——— Psychopathic Hospital in M—— they wouldn't take me at the other one without a special nurse day and night because they considered me dangerous with my ideas of self-destruction. I stayed there a month—the nurses were kind to me but I hated the doctors. One called me a boob and another continually asked me morning after morning 'if it were raining inside or not.' I had the packs twice daily and they quieted me some but I slept poorly and didn't eat so very much. It was there that I got so hard, bitter, and cynical and mean. Tom noticed it. I never went to sleep a night, nor in one of the packs without first having the sensation of having jumped out of the window. Then when Tom came on Sunday instead of going out for a nice time, we sat in the private parlor and I fought with him, cried and begged him to take me back to Chicago. They said I should stay at least six months and I believe that after three months they might have used metrazol. During the week I would lay awake nights planning how I would go out with Tom on Sunday and get to a drug store and buy some razor blades or sleeping powders or both and some night But when Sunday came I never got out of the place. I know he was very unhappy and had been for months. He seems happier now and says he doesn't care about the furniture but I don't know whether to believe him or not. I've cost him so much—the loss of the furniture, the doctor bills and hospital bills, but he says the money is the least thing.

"They wouldn't let me leave M—— alone so my mother came and was with me from the minute I left M—— until I left for ———. That was about June 1st. June and July were months of hell on earth. Mom had been here in 1931 and during the Fair and enjoyed Chicago so much. She is quite a talker and nearly drove me mad at times. I used to love the radio and be so intensely interested in certain programs but I got so I couldn't listen to them and yet she wanted to hear her pets. That annoyed me. Even now I can't stand to hear those programs such as "Life Can Be Beautiful," "I Want a Divorce," "What's Wrong With Marriage," "The Right to Happiness," etc. I went swimming a few times with Mary over at the University this summer and each time had a notion to jump off the diving board (I've never dived) but did jump off the side in the deep end. I drove recklessly when alone and talked constantly of the uselessness of life and how I wasn't any good, and was going to do away with myself. I wouldn't buy any new clothes for I didn't have any need for them. I wouldn't let

my mother help me do what little there was to do—I tried to get away from her but never could—just couldn't get out of her sight for a minute. Someone was with me constantly day and night for nearly six months. We went over to the lagoon and I rowed a boat a couple of times alone—she wouldn't ride with me, and when I got around the trees I was tempted—yet something just kept me from doing anything. She had no plans for going home and I knew she wouldn't leave while I was like that. I did ship her off to Green Bay, Wis., to see her brother. She had been wanting to go and I kept the knowledge of my having the passes from her for three weeks because I didn't want to go. Finally, she had a chance to ride up and I forced her to go. I followed a few days later but could hardly talk up there and wouldn't sleep with her—instead I slept out on the porch on a hard old cot. There was a day or two then that I must have been alone unless I was with Tom. I had that tightness in my back and arms and felt like someone was holding me back when I wanted to walk across the room. I did get back to the routine of daily bathing and keeping myself clean but just cooked enough for us to eat, baked very little, shopped from day to day (always figuring that I wouldn't be here much longer and we wouldn't need it), mended just what I had to—wouldn't shorten many of my dresses. Wouldn't take my mother to see people or places. We went with Tom a lot in the car and I got so irked at them talking about the crops, etc. I was sleeping better, although I don't remember so much about this summer, Tom says I was very restless. I know many a night I crawled in his bed with him. I haven't slept during the day for months. I quit writing letters to friends or relatives. I had nothing to say. I did Tom's typing all along for him and people at the office who knew I was sick, couldn't understand how I could type for him. I refused to go with Tom to the Boss' annual office party at a lovely country club on the lake. I had always enjoyed those before. I had some half unpacked boxes setting in the apartment and refused to do anything about them because I didn't care. Since it was on the second floor we used the front stairway and I felt if I could just sneak in and out without anybody seeing me it would be better. I had called several people while on 25th Street, who lived in this building, and had spoken of getting their own furniture offering to sell ours to them. I bragged so before and then to come running back like 'a whipped dog with its tail between its legs'; I don't think I could put into words all the feelings I've had and how I've hated myself for what I've done.

"Finally, I could stand it no longer, the people next door were having a big fight, I had put off a couple of dates until we couldn't put them off any longer and I felt like everything was crowding in on me so on Sunday morning I took the 6 sleeping capsules (Phenobarbital or something like that) and then woke up Tom and told him what I had done. Dr.— came and they say I called him everything under the sun and cursed him and they took me to the hospital. I remember part of it and remember going past the manager's husband with Dr.— on one side and Tom on the other. You know the rest. I had two special nurses and survived. I think a priest came to see me; I'm not sure. I told Dr.— he was no good and in four days insisted on leaving the hospital, much against his wishes. For several weeks he kept me coming to his office for shots and pills and each time I told him he wasn't doing me any good and that he didn't know anything, was just

trying to run up a bill and the same went for that guy they were trying to keep me alive to see. I didn't want to go down to see you that first night but now I'm glad I did."

The above account is an excellent description of a patient's feelings of confusion and self-condemnation during a depression. Rarely do patients with physical pain suffer so much as do depressed patients. Physical examinations and laboratory tests reveal no pathology; yet there can be little doubt that such depressed states result not from disturbed ideas, but from physiologic change.

This picture of the physiologic depression may be modified by, (1) agitation, and (2) psychoneurosis. The agitated depression (often termed involuntional melancholia) differs from the simple physiologic depression by the presence of marked anxiety which leads to agitation and restlessness. The patient may pace the floor constantly, rub his scalp, pick at the skin, and wring his hands. The patient complains bitterly of the way he feels, and talks much of the futility of living. There is a constant pressure of thoughts which revolve about specific errors committed and which are insisted on as being inescapably ruinous. There is marked indecision,¹ and it seems impossible for the patient to declare quickly and specifically that which he wishes. On occasion it takes hours to dress, if there is a choice of clothes to be made; and one patient spent an hour each morning trying to decide whether to put on first the left shoe or the right one. Crying is frequent, often assuming a whining character. There are so many plans which the patient wishes to carry out and yet is unable, and no amount of persuading will enable him to do one thing at a time. Spastic constipation is common, and retention of feces may require manual removal because of impaction. The drive toward suicide becomes very intense; and the old adage that those who threaten suicide never carry it out, is again and again disproved by just such patients. Suicide is committed in moments of anxiety, and the greatest ingenuity is used to obtain lethal weapons or drugs. In hospitals, when everything possible is removed that could be used toward this end, patients will leap headlong down the stairs, or run the length of the room smashing their heads into the wall in their desperation. One of my patients, failing in all other methods, tore out his big toe nail, in an effort to obtain something with which he could cut his wrist.

¹ *Vide* p. 135.

Since the discovery of convulsive therapy, these intense suicidal drives are for the most part eliminated. Attempts at psychotherapy alone, or institutionalization alone can meet with little success, for this state of depression is physiologically based, and psychologic factors are of secondary importance. These patients cannot control their emotional states by an effort of will.

THE DEPRESSIVE EQUIVALENTS

There are many patients who complain of symptoms which appear to be psychoneurotic but which are in reality *equivalent expressions of an anxiety depression*, in very much the same way that some fugues are epileptic equivalents. These depressive equivalents are symptoms of tension; and by his concern over these symptoms, the patient expresses the full force of his anxiety. Thus a patient instead of manifesting the usual symptoms of depression as discussed herein, may have, instead, intense spasms of the intestine, a "globus hystericus," cardiac pains, and other manifestations. There may be unrelievable headaches, pains in the chest, "excess acid" in the stomach, frequency of micturition. When, however, the physician studies these symptoms more carefully, he discovers that they arise in the setting of a depression; *i. e.*, the patients prior to the onset of the particular symptom have been retarded in activity, thought, and speech, and have felt "low." When the tension symptom appears, the patient is convinced that his depression is the result of the symptom and refuses or is unable to recognize that the reverse relation is true. These symptoms last as long as does the depression—anywhere from a few months to a few years—and disappear when the depression lifts. Frequently patients are insistent that their cure is the result of some medicine or procedure which they happen to be utilizing at the time when the depression itself is clearing up.

It is essential that the physician recognize the origin of these depression-equivalent symptoms, for such recognition will guide him in his choice of therapy. There is a definite and often easily accomplished treatment for the physiologically determined depression symptom or its equivalent, a therapy which is radically different from the one called for by the presence of symptoms which are primarily organic or psychoneurotic in origin.

Mr. M. K., aged thirty-seven years, a pharmacist, complained for many weeks of severe headaches. He had access to all sorts of drugs, and tried everything from aspirin to codeine, even to morphine. He was deeply de-

pressed, his low spirits, he maintained, being the result of the fact that his headaches prevented him from working. Finally he gave up his work. When he was seen several months later the headache was recognized as being a depression-equivalent symptom, and two metrazol treatments were given. This hitherto unrelievable headache of six months' duration disappeared, and within a week the patient was back at his work.

Mr. M. C., aged forty-three years, complained of an irritation in his throat and a pain in his chest. He was depressed, worried constantly, could not sleep, and was sure that he had either cancer or heart trouble. He went from one physician to another, always being told that there was nothing organically wrong with him, that he was "just a neurotic" and "to forget all about it." When the patient was seen and his underlying difficulty diagnosed, many of his symptoms disappeared with the aid of psychotherapy, though the basic depression took several months to remove, since the patient refused to have shock therapy.

Mrs. H. H., aged forty-three years, was referred from the medical dispensary. She complained of intense burning in the stomach, which was constant morning, noon, and night. There was no relation to meals, to types of food, although sweet foods made the pain worse. X-ray examinations and an Ewald meal revealed no pathology. She wanted something done for her gastric distress, and she complained bitterly that no medicine seemed to give her relief. On giving further history, she revealed the fact that the gastric pain had occurred every fall (the interview was in November) for the last five years, and that it had lasted from two to four weeks on previous occasions. Moreover, she brought out the point that she had been melancholy during these years and the melancholy spells seemed to last for several months. At the present time she admitted that she was depressed, and on recollection admitted that the depression had started early in September, and in the past had continued until the spring. During this time she had not slept well, had eaten poorly, was constipated, and in the middle of the depressive episode, had developed a gastrointestinal attack similar to the one she had now. The pain in the abdomen had disappeared spontaneously as did the melancholia; and moreover, in the spring of the year she felt very happy and the worries she had most of the year did not seem to trouble her then.

This patient had an obvious manic-depressive psychosis which alternated between depressive phases which occurred in the fall of the year and manic phases in the spring and summer. The attacks were not very acute, so that she was classified as a neurotic patient; and when they were intense, her attacks had a focal expression in the stomach. The treatment of this patient consisted of treatment directed toward the depression, and with psychotherapy, social therapy, and work therapy, in addition to benzedrine and barbitol she improved rapidly. The phenomenon was explained to the patient, and she was made to understand why no therapy was directed toward her gastrointestinal complaint. She understood

sufficiently so that she did not ask for specific treatment, but co-operated well in an effort to get at and cure the cause.

Other vicarious reactions occur during the depressive period. Alcoholism¹ as will be discussed later, increased domestic difficulties leading to divorce, etc., are difficulties which may be precipitated by this physiologic depression. These presenting symptoms hide and confuse the underlying symptom complex, but all abnormal personality reactions should be thoroughly investigated, in order to determine the presence or absence of these physiologic mood changes.

THE NATURE OF THE PHYSIOLOGIC DEPRESSION

The nature of the physiologic depression is not clearly understood. It has generally been regarded as a "mental" disease, yet as we have seen, the illness develops and recedes with no apparent psychologic stress. Experience proves that psychotherapy is only an adjunctive therapy during the illness, and that the personality reactions are merely the reflection of the underlying slowing down of all physiologic activities. In a manic phase, a sixty year old white-haired woman may have youthful pink cheeks, and vivacious sparkling eyes, while the twenty year old girl suffering from a depression appears haggard, old, and lifeless. These are physiologic changes; and yet most of our present studies can find no consistent changes in the basal rate, in the blood chemistry, or in any other bodily function. Clinically, one has the impression of increased efficiency of all functions in the manic phase and the reverse in the depressive phase. When patients ask for the site of the lesion, I must confess to them our general state of ignorance about it, yet give them an explanation which, while not scientifically accurate, does have the virtue of being diagrammatically clear and comprehensible.² The simple improvised explanation is that in manic states the circulation of blood through the brain is increased so that there is better oxidation within the brain cells and thus increased activity. Thus the wittiness and cheerfulness of outlook are dependent on the cellular activity; and the converse is true in depressive states. Patients can do much to modify this emotional state, but it is important to realize that the "*mental*" symptoms are the result of physiologic changes, and that no amount of effort of will can make them "feel" happy. It is difficult for the patient to utilize this information, although he may readily understand it psychologically, and although it is repeatedly proven to him as he

¹ Vide p. 471 ff.

² Vide p. 181.

swings up and down in his cycles of improvement.¹ Nevertheless, the understanding of the nature of the illness, relieves the patient somewhat of the too frequent self-accusations of inferiority and aids in removing the neurotic features which spontaneously tend to be associated with the depressive state.

One can only theorize as to the site of the lesion in the manic-depressive swings. The fact that many "normal" persons are subject to such swings although to a lesser degree makes for the impression that there is some general metabolic or cellular fluctuation which we have as yet not been able to measure. In severe depressions, however, the very inability to "feel" normally, and the welcoming even of painful sensations so that one may experience at least some kind of normal sensations, would indicate that the highest level of sensation is disturbed. This level is generally associated with the thalamus, and Head's patients who suffered from destruction of one side of the thalamus experienced differences in sensation which are analogous to the disturbance of subjective sensibility found in severely depressed patients, although actual appreciation of touch, pain, and temperature is unaffected. One patient on recovering from the depression stated that she was better able to feel pain than she had been in the depths of her depressive state, indicating by her statement the change of quality of her appreciation of pain.

TREATMENT

The treatment of these manic-depressive swings may be divided into four parts: shock therapy, psychotherapy, environmental therapy, and drug therapy. The first will be discussed in Chapter XVIII. It may be stated here, however, that shock therapy is of preëminent importance in the treatment of depressions. Manic patients do not, as a rule, react so favorably. In agitated depressions, or the so-called involutinal melancholias, the convulsive shock therapy² works almost miraculous effects. The dangers of fractures of the spine, of other bones, of damage to the heart, etc., are found in actual practice to be at a minimum, and certainly far less dangerous to the individual patient or to the family than the prolonged grief and anxiety experienced by all concerned if the depression is left untreated. Moreover, the percentage of patients who remain chronically ill without treatment is far greater than those that suffer from the treatment.

¹ *Vide* p. 285.

² *Vide* p. 450 ff.

Psychotherapy is of great importance, primarily as reassurance. During a depression, the patient is very liable to consider everything as hopeless and strongly to contemplate suicide.¹ Moral support on the part of the physician is of inestimable value. Encouragement, reassurance, and a sympathetic attitude toward the patient are of primary importance in helping him survive the period of acute depression.²

Psychotherapy directed toward the patient's past emotional life and his behavior patterns tends to fail during the acute phase of either the depression, or of the manic swing. During this phase, the patient cannot think logically from conclusion to conclusion, and cannot believe even that which he has been guided to reason out. *Stronger than all reason* is the prevailing tone either of exaltation in the manic phase, or of hopelessness in the depressed phase. During the acute period, therefore, most of psychotherapy should be directed toward maintaining the patient's morale. Furthermore during this acute phase, there should not be any urging of the patient to force himself into activity. If possible the usual routine should be maintained and some forcing is desirable toward this end; but more should not be required. The reason for this injunction is twofold: first, the patient is incapable physically and mentally of doing more; and secondly, on attempting to do more, the patient will become more deeply depressed by the failures which are bound to occur. Often the relatives will insist that if the patient is permitted to do little, he will become worse; but they do not understand that the illness is not a matter of a "mental" attitude, but a real and definite clinical physiologic illness. The only chronicity may come from the psychoneurotic features which may be associated with the depression; and since there will be a spontaneous improvement from the depressive state *per se*, the physician can reassure the relatives that they need not be concerned.

As the patient begins to recover, however, from the depression, and this improvement may take many months in some patients, it is well to begin to discuss with him his reaction patterns, how they came into being, how they are ineffective or harmful, and how to change them. The depressive state will interfere with the patient's complete comprehension and ability to adopt what he learns in such interviews, but constant reiteration will in time help make these new ideas automatic. During this time if the patient asks how psychotherapy can help a physiologic ailment (although the patient is usually convinced of his own accord that he is lazy, "a crazy fool" or going insane), he must be told that the psycho-

¹ Vide p. 413.

² Vide p. 404.

logic attitude can do much to retard or accelerate recovery from such a physiologic state, and that every effort must be made to remove all psychoneurotic obstacles. There may have been many psychologic factors in his life previous to his "breakdown" which predisposed him to his illness; and removal of these predisposing factors will be of value in preventing any future breakdowns. The psychotherapy of these factors is the same as discussed previously. Rigid personalities¹ are common among these breakdowns, the patients often working at a high level of efficiency objectively, but being tense, overly conscientious, and restless subjectively. On the other hand unstable, emotional and psychoneurotic features may characterize the life of the patient before the depressive illness. The clearing up of these factors may not prevent the recurrence of another manic-depressive episode, but it can prevent a neurosis from being grafted upon and continuing after the depression, and it can so modify the person that should a depressive attack reoccur, he because of his helpful psychologic attitude will not become so deeply depressed.

Environmental therapy depends upon many factors. The financial status of the family may permit certain helpful techniques, such as providing a pleasant home and non-depressing surrounding, an intelligent companion, such diverting activities as golf, motion pictures, etc. Where these elements are not available, psychotherapy of the family may be beneficial to the patient. Training the family in how to act, in what to say, in understanding that the illness is not the result of lack of "will power," that encouragement and reassurance will do far more to cure the patient than criticism and nagging, that protection from self-harm is constantly necessary, etc., often does more for the patient than do many attempts at the psychotherapy of his emotions, particularly in the acute phase. The family must learn that the physician will not permit chronic invalidism to occur; because as soon as the patient "comes out" of the depressive state he, by intense psychotherapy, will be urged into more integrated activity than ever before; but until the physician recognizes the time, urging the patient to do more than he can do, results only in harm.²

Social therapy is of vital importance;³ yet here again, it will be observed, that when patients are improving they will need very little urging to mingle with others. During the acute depressive episode, there is an intense aversion to being in the company of others even though the patients may previously have been very sociable. When these patients are able to get out into groups, the

¹ *Vide* p. 214.² *Vide* p. 142.³ *Vide* p. 253.

first few visits are often associated with much irritation and boredom, but these feelings are soon overcome, and there is a partial relief of tension as they have to enter into conversation with others.

Work therapy is also of value.¹ It is well for men who are engaged in occupations to continue with their work, unless their slowness and depression are definitely interfering with their efficiency. In these cases even a short course of metrazol is of value in order to overcome the acute phase, but thereafter, the routine work should be carried on. The necessity of forcing one's thoughts toward some objective problem, even though it be routine, is of help; for loneliness and lack of activity give the patient more time to think of his unhappy subjective state. Yet it is important not to overdo this required activity, for should the patient fail to continue at his occupation, his depression will be accentuated, and he may be driven to desperate measures if he becomes convinced that he is an utter failure. As a rule, less activity than usual should be required, but the activity should permit a full day's work, even if it is not intensive. Also since the morning hours are the most difficult for the patient, the work, if possible, should be done toward the end of the morning and during the afternoon. The patient may complain of being unable to concentrate, and of doing his work poorly; but if such work does not seriously jeopardize his livelihood, he should be urged to continue to do it as best he can.

Institutional therapy may be needed by patients who become so depressed that a suicidal attempt is imminent. It must be remembered that many patients talk of suicide for some time before they actually make the attempt; and one should not dismiss lightly suicidal threats, particularly if they are made in the setting of a depression. It is as if these patients have to work up courage before making the actual attempt; and it is fortunate if the patient merely takes an overdose of sedative which can be checked in time. Once the patient has leaned out the window too far, there is no recall. Therefore, in many situations, institutionalization is distinctly advisable; for in addition to the protective elements, there is opportunity for the use of shock therapy.

In the institution, there is opportunity for many corrective procedures: hydrotherapy in the form of continuous baths (temperature from 94 to 96°), or needle sprays or scotch douches which spray a heavy stream of water down the spine; occupational therapy, with work in carpentry, basket weaving, loom work, needle work, bookmaking, leather working, and a host of other minor occupations which take the patient out of himself; recreational therapy in the form of motion pictures, outdoor sports,

¹ *Vide* p. 255.

dancing, games, theater projects, and so forth. Moreover, in an institution, the care of nutrition, of elimination; of sleep difficulties is all facilitated because it is under medical control.

Drug therapy, exclusive of metrazol, may be stimulating, quieting, and sleep producing. The stimulating drugs are few in number, caffeine in the form of hot coffee being a common drug. In the milder depressive states, benzedrine sulphate, mg. 10 early in the morning and three hours later is of value. As mentioned previously the dosage may have to be doubled or halved according to the patient. Often it produces only a state of irritability instead of an improvement in mood. Generally, after several weeks the effect of the drug wears off, and it may have to be discontinued for a while before it is used again. Sedative drugs are many, and their main purpose is to relieve some of the anxiety and irritability of the patient. For many patients powdered opium is most effective in $\frac{1}{4}$ grain doses, but every effort should be made to prevent the patient from knowing what medication he is getting. However, this opium compound should be used only in very tense persons, for there is a marked constipating effect in an already constipated person. Diet, oil, habit, and enemas may be required. Barbitol, in $2\frac{1}{2}$ grain doses three times a day, is often of value in the milder cases, not only in relieving tension but in facilitating sleep. There are many idiosyncrasies, however, and there is a wide variety of drugs which can be used for many patients. It is very difficult to find sleep producing drugs¹ which will continue to work and which do not leave any after effects. The depressive patient is very resistant to drugs. As has been mentioned, most patients go to sleep rather easily, but awaken in the early hours of the morning and are not able to return to sleep. Many different hypnotics will have to be tried, for the patient tends to develop a tolerance. Sodium amytal, sodium pentobarbital, phenobarbital, and seconal are particularly effective.

SCHIZOPHRENIA

Schizophrenia (formerly called dementia precox) is one of the psychoses without any as yet proven organic pathology. Schizophrenia, or more properly the schizophrenias, for there seem to be different disorders grouped under this one heading, occur most commonly after adolescence, are of gradual onset, and usually emerge from a shy, sensitive moralistic personality, slowly developing symptoms characterized by suspiciousness, ideas of reference, paranoid tendencies, phantasy formation, withdrawal from reality, delusions and hallucinations.

¹ Cf. p. 338.

The etiology of this condition is unknown. The strongest suggestion today is that of a hereditary predisposition. Yet heredity does not show itself by dominant characteristics, for only 3 to 5 per cent of the siblings or parents of schizophrenic patients have an outright schizophrenic illness. On the other hand, studies of monozygotic twins indicate, according to one author, that 44 per cent of these twins have the disease in both siblings, certainly an extremely strong indication of the importance of heredity. In dizygotic twins, only 5 per cent of the twin siblings of schizophrenic patients have the same disease. There are other studies which state that a large majority of these patients have relatives who have "neuropathic disorders," but the term neuropathic is so all inclusive as to be of little value.

The physical constitution seems to be related to the kind of psychosis present. Physical constitution does not determine the disease; but the same genetic or developmental forces which produce a susceptibility to schizophrenia tend to produce an asthenic athletic physique. This correlation is far from being a perfect one, yet it occurs often enough to be considered. The reverse situation is of course not true, that asthenic-athletic physiques predispose to schizophrenia. The asthenic patient tends to be thin, with an egg-shaped head, much hair on the head and little on the chin or chest, a flat chest with narrow shoulders, an acute sterno-costal angle, a flat or gastroptotic abdomen, poorly developed musculature, and small joints. Athletic persons are tall, with a shield-like face, well developed secondary sex characteristics, broad shoulders tapering down to a small but powerfully developed abdomen, strong muscles, and large coarse joints. Pyknic persons are relatively short and heavy, with round faces, a tendency to baldness early in life, heavy chin hair, as well as a heavy growth of hair on the chest, narrow shoulders sloping outward to form a wide based thorax and an obtuse sterno-costal angle, a well-rounded abdomen, well-padded extremities, and fine delicate joints. Dysplastic physiques approximate those associated with such endocrine disorders as hyper- or hypopituitarism, and there are disproportions in body lengths and sizes. It must be remembered that most normal persons are an admixture of all three types. In a study of a freshman medical school class, I found it almost impossible to classify the majority of students into typical physical categories, and only a few extremes were of typical character. Similarly, psychotic patients are not easy to classify, although they lend themselves more easily to such divisions.

Birth trauma has been indicted as a possible cause of schizophrenia. It has been suggested that the residual damage to the

brain resulting from such injury so interferes with normal development as to predispose the person to schizophrenic processes.

Physical illness has frequently been said to be the etiologic agent in schizophrenia. Kraepelin states that it occurs as a result of autointoxication secondary to a disordered secretion of the sex glands. Mott has indicted the entire endocrine system, and spoken of disturbances in the ovaries, testes, adrenals, and pituitary. One author states that schizophrenic males have female distribution of hair and that the female has a masculine distribution. Another author postulates that some infectious disease is at the basis of most psychotic states, and claims cures of these conditions by removing infected teeth, tonsils and appendices. Yet despite the innumerable accusations laid at the door of physical disease as the primary basis of schizophrenia, the consensus today is that they play a minor role.

Puberty and adolescence play important roles. Many patients first show the insidious signs of their illness in the adolescent period. Just what changes in the growth and structure and function during adolescence are responsible for the development of the illness is not known; but the rarity of schizophrenia in childhood and the preponderance of incipient schizophrenia in the adolescent phase tend to indicate that some physiologic change associated with puberty lies at the basis of this illness. Menopause may also precipitate a schizophrenic reaction.

A most frequently observed phenomenon is the characteristic prepsychotic personality. A large percentage of these patients are shy from earliest childhood. They are sensitive to the slightest hurt, and though they often have good intelligence and make excellent school grades, they find little to discuss with their schoolmates, and lack initiative and aggressiveness. Often, there is an excessive moralism, sufficient, on the one hand, to prevent smoking, drinking, or sex relations; while, on the other hand, there is an over-concern about masturbation together with phantasy about sex. While this typical "introvert" personality is common, it is not always present.

Psychic trauma may play an important role in precipitating this illness. Concern over some insult, feelings of rejection by one's mate, belief that one has failed in some ambition, etc., may bring about schizophrenic symptoms. However, these "psychic traumas" are in the nature of "wounding the pride," rather than in terms of financial or social difficulties. Moreover, one is strongly impressed by the fact that the person in whom psychic trauma is capable of bringing about this form of illness has a definitely susceptible personality.

In summary, it may be stated that the etiologic agents of schizophrenia play their role in the interaction between the hereditary-constitutional predispositions and the precipitating factors. These latter stresses may be (a) physiologic, such as in puberty or pregnancy; (b) organogenic as in toxic infectious states, pernicious anemia, thyrotoxicosis, or senile brain degenerations; or (c) psychologic as with acute feelings of inferiority, of "being different," or marital rejection.

Generally speaking, the greater the predisposition the less the amount of precipitating factor necessary to bring about the disease; and prognostically, the patient has more chances of cure if the schizophrenic symptoms developed only after a severe precipitating factor than if they came on insidiously and without apparent cause.

The pathology of schizophrenia varies according to the author. Mott found chronic degenerative changes in the glands of internal secretion of schizophrenic patients while another worker demonstrated that similar changes were found in patients who died with other kinds of illnesses. Some authors have found degeneration and ganglion cell changes in the third layer of the cerebral cortex, but this finding is not confirmed. Nolan Lewis, after studying much autopsy material, found that catatonic and hebephrenic patients suffered from a relative aplasia of the circulatory system and the endocrine system.

Physiologically, the schizophrenic patient tends to be thin, his blood pressure is usually low, and the basal metabolism is on the minus side. There are other evidences of physiologic sluggishness, but they fall on the lesser side of normal rather than into the definitely abnormal.

Symptoms.—There are many variations in the clinical pictures ranging from that of the catatonic schizophrenia developing at the age of eighteen in the shy, sensitive, phantasying adolescent, to that of the paranoid schizophrenia showing itself for the first time at the age of thirty-five, and arising in the setting of a dominating, aggressive, albeit peculiar person, but the usual onset of this disease is gradual and develops insidiously out of the patient's usual character.

The onset of the symptoms is gradual and emerges imperceptibly from the patient's personality. There may be increased irritability, with outbursts of anger over minor incidents. Suspiciousness develops, at first directed toward strangers, and then toward members of one's family. Sensitiveness becomes acute, and the patient feels that people are looking at him constantly, and believes that remarks made by strangers are intended for him. At the same time the patient becomes preoccupied, sitting for hours,

staring off into space, and not paying attention to what is said to him until it is repeated two or three times. Habits deteriorate, and a once cleanly and fastidious person becomes slovenly in appearance and eats wolfishly or not at all. Asocial tendencies develop, and the patient refuses to go out, or goes into another room when company visits the home. Laughing to oneself and talking to oneself are frequent, and the patients seem to "have something on their minds." Mannerisms or peculiar motions and actions are repeated constantly. Sleep is disturbed and these patients may put the radio on full blast at 2 or 3 A.M. or disturb the household in some way during the night. Not infrequently masturbation will be practiced several times daily; rarely are attempts made to have normal sex relations. Paranoid ideas may involve the family, patients often accusing them of poisoning the food, wishing to harm them, making a plot to kill the patient, etc. Delusions and hallucinations are common; the patients hearing voices of strangers through the walls, smelling gas which was injected into the room to kill them, seeing strange men signaling at each other, refusing to go out for fear of being spied on and followed, feeling electricity go through their body from some infernal machine, doing things automatically because they feel hypnotized, etc. Violent temper outbursts are common with shouting, breaking of furniture, and often with physical violence toward a parent or mate.

Schizophrenic Thinking

As the disease process becomes more firmly established one finds many disturbances in the processes of thinking and of feeling. These disturbances are based on the fact that the patient tends to resort more and more to living, thinking, and feeling in his dream world and to become less and less aware of or interested in the outside world. Ideas are no longer checked by reality. They are elaborated upon, altered, distorted, combined, dissociated, dis-united and, finally, are incomprehensible to the ordinary person. Whenever ideas are untested by reference to actual situations, they tend to evolve in a distorted fashion. Similarly, the patient's impulses become his master; but instead of seeking the gratification of his impulses in actual real life, he finds it easier to satisfy them by "imagining." Thus, one schizoid young woman found herself greatly aroused sexually whenever she thought of her "boy friend" and was even more so stimulated "sitting beside him in the street car," but the moment "he tried anything" she experienced a feeling of revulsion. The satisfaction of her daydream world was far greater than that of the world of reality. The emotions expressed toward the outside world are, therefore, rather

superficial; for the patient is concerned more about his own feelings in fancy. Occasionally, if the outside world touches too closely upon a topic about which the patient is concerned he will fly into a terrific rage over some seemingly inconsequential stimulus; for the stimulus is in some way connected with their concepts. Thus, one young schizophrenic patient aged twenty-eight years, quiet, seclusive, and never having exhibited any violent behavior, suddenly arose from his bed and attacked the male patient in the next chair so violently as nearly to kill him. When asked for the reason for his attack he replied that the other patient had "wiggled his toe at him." When he was asked why that sign brought forth the attack, he replied that "obviously the wiggling toe was the same thing as calling him a homosexual." Just how this sign meant homosexuality could not be determined from the patient but it is not difficult to understand that in his own mind the patient's concern over his own latent homosexuality together with the phantasy built up over it caused him to project his guilt feelings. Or, on the other hand, a young man, seemingly demure, quiet, polite, yet always daydreaming, made a sexual assault upon a passing girl. In his own mind he had built up his ideas of sex, his concept of what he would wish from a girl, his phantasy ideas of reciprocation, and his pent-up desire accumulated to the point of a sudden and brutal expression. The actual wishes were inhibited in real life but dwelled upon at great length in the dereistic (phantasy) world. There was no checking of his ideas with reality.

The thinking processes show disturbances in association which at first glance have no understandable basis. The schizophrenic patient starts with one stimulus and emerges with a conclusion which seems entirely irrelevant. Yet on closer examination, one can see the relation between the "schizophrenic thought" and the primitive kind of thinking evident first in animal "thinking" in aboriginal tribes, and in early childhood (see page 49).

This type of primitive thinking is widely used by schizophrenic patients. The schizophrenic thought is not identical with primitive man's thought any more than it is identical with the primitivity of a child's thinking; but assumes that things which are alike superficially, whether it be in sound, form, or "idea," are identical. It is this tendency which leads to such peculiarities of schizophrenic thought processes as (1) clang associations (things sound the same); (2) neologisms (parts of words meaning similar things are combined to form a new word—thus the word "steamsail" is the combination of two words which are similar, steamship and sailboat); and (3) mannerisms (for example, walking about with the hand held high

and the fingers in peculiar fashion, is to the patient identical with carrying a scepter which, in turn, signify that he is king). One can see this primitive thinking, in the case of the schizophrenic girl who "thought" that when she looked into the sun she obtained the sun's power, so that she could go into the garden where green tomatoes grew and that she could, solely by looking at those tomatoes, make them ripen. The primitive laws of thinking enabled this patient to assume for herself the power of the sun simply by absorbing power through her eyes (law of contagion, see page 49). In a similar fashion, she thought that since man has a wife the sun also should have a wife; and, the law of similarities still operating, she boasted of uniting the sun and the moon.

Disturbances of association occur. The patient, himself, follows a reasoning process, although to the outsider the process appears to be the formulation of an *un*understandable conclusion on the basis of an unrelated assertion. These schizophrenic conclusions are reached by the process of primitive reasoning. There is, in addition, an admixture of ideas which result from immediate phantasy gratification of desire, and from ever-present emotionally determined constellations of the past. One patient, for example, stated that "German agents were out to get her because she saw a doctor lying on the sidewalk and did not want to take ether." Such a sentence makes no sense—on first examination, but for the patient there was a great deal of meaning. On being questioned, the patient declared, "I was in the psychopathic ward, and suddenly looked out of the window to see (apparently hallucinating) a doctor lie down outside my window, and he did it deliberately to make me feel funny. I went to tell the nurse, and she said, 'you've got to take some medicine' and they gave me ether (paraldehyde). I didn't want to take it and so they started to force me. They were against me because I come from Czechoslovakia and the Germans are against me."

The patient's statement which she first made "that German agents were out to get me because I saw a doctor lying on the sidewalk" thus had many connotations and ramifications within her own mind. Indeed, each of the subsequent explanations had further interpretations. When asked why the doctor should lie down on the sidewalk before her window, she replied "Well, in the hospital there were patients who were tied down in bed and it was unnecessary. I looked at this doctor and he didn't like my looks, so he wanted to make fun of me, that's why he lay on the sidewalk—to make fun of me." The apparent dissociations in thinking thus often have their bases in actual incidents; whereas the

patient's reaction to these incidents, based on primitive (and other) types of thought, appears incongruous and dissociated to the observer.

Condensations and displacement (see page 50) occur frequently. Patients will combine words and phrases so that what is expressed is unintelligible to the auditor but meaningful to the patient. In the same way, the use of symbols is greatly elaborated and original ideas are displaced and expressed symbolically.

Thus one patient began to talk to "spirits." She then started emptying the dresser drawers searching for them. Her strange actions were accompanied by the washing of herself many times a day. Finally she began to complain that people were injecting "gas" into the room to poison her. This patient was a Lutheran married to a Catholic and concerned over this religious difference. The spirits symbolized to her both angels and devils, and they both praised and berated her. The emotional turmoil over the religion so disturbed the patient that, unable to bear the emotion, she dissociated the turmoil from her own conscience, projected this disturbance into the outside world, and conceived that it was not her own conscience, but someone else, spirits, who were berating her. Then, since spirits are more tangible than ideas, and therefore have "form" she began to pull out dresser drawers in search of the spirits. The conflict, together with other ideas of inadequacy, made her think in terms of "sins" and "sins" are dirty, unclean. To primitive thought, that which is unclean should be cleansed so she set about washing her hands and face many times a day. To her relatives, who did not understand her process of reasoning, this "obsessive" washing had no meaning. The ideas of sin and dirt made her more aware of uncleanness and odors. Soon she began to notice that there was a strange odor about the house, an odor "like gas." Strange odors were distressing, and together with the feelings of persecution, they led to the secondary "primitive thought" that someone was trying to poison her by gas."

Martha M., was sixteen when she was admitted to the hospital. At the age of fifteen, in January, she had become avidly interested in theosophical literature, and spent most of her time reading on this subject. Early in September, before her hospital admission, she wandered away from home, and when found she became violent in her arguments. She refused to eat, and was extremely emotional. She improved, and it was decided to take her to Florida in the hope of benefiting her. They started December 1 and for the first half of the day the patient appeared normal. Then she began to giggle foolishly over nothing. At night she could not sleep and kept up a steady stream of conversation. The next day, she was very excited. When they reached Florida the patient screamed and said "I've been locked up enough I won't stay here; I'm going out." The mother consulted a policeman who stated that his son would look after the patient. The young man accompanied the patient who insisted on going down to the Everglades. She took off her clothes and insisted on wading in the mud, and stated that she would be Eve, and he could be Adam. He finally succeeded in getting her dressed and brought her back to the hotel early in the morning. The patient became angry, kicked and scratched her mother, who then took the patient to a sanitarium. There she refused to recognize her mother, saying "You're not my mother; I've never seen you before."

The patient had walked and talked before she was one year old. She went through grammar school as a brilliant student and seemed normal. In the first year of high school she made high grades, and seemed to make normal social contacts. In the second year, she became a "book worm" and lost interest in her friends. She became retiring, stayed up late at night reading voraciously, and made a considerable effort to "outshine" other children. She was poor in mathematics and disliked the subject, but made good grades in other subjects. At that time the patient complained to her mother that she thought something was happening to her, that she was unable to remember things that she read, and that she was unable to concentrate. However, she insisted on finishing school. She made no effort to study despite scoldings. Her mother stated that "she acted as if she had a lot of dope," and the patient spent much of her time lying down. One day she told her mother "I think I have dementia precox." That summer she became interested in theosophy, and subsequently took the trip to Florida during which she developed the psychotic symptoms.

On the ward, she did many things which appeared to be unmotivated, rambling, and purposeless. Frequently she laughed and giggled. She repeatedly jumped out of bed, ran about the ward, and then jumped into bed. When given hose, she tore them up, ripped the lining out of her shoes or sat with a blank expression while ripping her clothing. Occasionally she scribbled pages of what seemed to be Latin and French exercises. She seldom talked, usually obeyed the routine of the ward, and not infrequently would sit for long hours playing at the piano, playing well.

The thinking done in primitive associative manner is so determined by that which immediately precedes the thought, that the *speech* of the deteriorated patient has no central idea and is very *circumstantial and wandering*. The only central theme one can discern is the *egocentric* relating of everything to one's self. Similarly, one does not see what Bleuler calls "by-associations" or "mediate associations" because so much of the thought process is not visible to the outsider.

"*Blocking*" frequently occurs. The patient does not answer to questions or responds only after a long period of silence. Such blocking in thought process is to the outsider but a delay. The patient may hear the question asked, but is so "preoccupied" with his own thoughts that he does not answer. The "blocking" occurs in a period of reverie, often below the conscious level, in which the patient indulges.

Because of this same preoccupation, the patient may *perseverate* in his word processes. Thus he may give an answer, "It's fifteen," and then repeat this phrase over and over without apparent relation to the next question or the situation. This repetition is but a formal reaction. The patient is dimly aware that an answer should be given to the examiner's next question, but has become so preoccupied again with his own thoughts that he does not think of an answer and repeats the phrase he last used simply as some form of response, while he continues his phantasy. In other instances, the

perseveration of a phrase may be significant as an expression of some internal conflict, and as a symbol of that which is disturbing to the patient.

Patient William Z., aged eighteen years, was brought to the hospital by the police who found him walking about, not knowing where he was going. When asked questions, he would yell at the top of his voice. The patient had been a full-term, normal child and had the usual childhood illnesses. He was in the third year at high school, had made normal progress, and was considered an intelligent student. He had few friends, rarely went out with girls, did not drink, and had no sex life as far as could be determined. Six months before admission, he was struck by a cab and broke the tip of the malleolus, but was able to go about with a cast. The leg healed quickly. A week before admission the patient came home from school saying that since he had broken both legs he was dead. He said that he was going to be a lawyer first, then a doctor. When the mother told him not to talk so foolishly, as he had not even finished high school and so could not be a doctor for a long time, he began to yell. The next day he refused to eat and the family kept him home. The next day he was permitted to go out early in the morning for a walk, but when he had not returned by midnight, the family searched for him and finally found him standing near a corner newsstand. He was talking to himself and whistling. He returned home but refused to eat. He mumbled to himself all day, and because of his peculiar behavior the family refused to permit him out of the house. He talked about being dead, about being a doctor, about its being daytime when it was dark. He was taken to a sanatorium where he remained for six months, improving slightly. When he returned home, he had lost all interest in his personal appearance, refused to eat, lost much weight, wandered about the city till early morning hours. He refused to speak to his family and was mute even with strangers. He was then confined to a state institution. Under insulin shock therapy, he improved considerably, returned to his home, secured employment, and manifested none of his abnormal behavior. He remained quiet, however, somewhat seclusive, and was not considered as "cured."

Similar to the disturbance in thinking is the *disturbance in affect*. Textbooks state that the schizophrenic patient has an absence of emotion, but while the emotion seems to be dulled, or perverted, or absent in the patient, he still reacts with violent emotion to those things which touch on his "complexes," or which are, in his phantasy, distressing. The difference between the normal person's and the schizophrenic's reactions in emotion as well as in thinking is most evident in external expression; the internal responses are often keen and intense, but are suppressed or distorted so that the external responses appear peculiar.

The schizophrenic patient tends, early in his disease, to have an admixture of marked indifference, apathy, and explosive irritability. Frequently, the patient is superficial in his responses, and when he does express emotion it has a *theatrical appearance*, that is the emotion appears to be mimetic and without sincerity. When

one tries to obtain rapport with such a patient, one does not feel the warmth of response one finds in the manic-depressive or neurotic patients or, if these latter patients are antagonistic, one does not feel a purely personal antagonism; instead the schizophrenic patient is indifferent and his expressed anger or pleasure seems tinged with complexes and intensities which bear only an incidental relation to what the examiner has done. Many of these patients are so indifferent to emotional stimuli as to have an *affective rigidity*, or even an *affective dementia*. In the more advanced case, there is parathymia, an emotional expression at a variance with the situation, so that patients may laugh in distressing situations, or cry when the situation demands amusement.

Yet the patient is usually possessed by a marked feeling of inadequacy. These patients often are consciously aware of being different, of their inabilities. Even many of the patients who express such delusions as being God, or Napoleon are, via primitive thinking, compensating for their feelings of inferiority by becoming superpowerful. Associated with these feelings of inadequacy are elements of fear and anxiety. These elements stem again from their vague emotional uncertainties and their sensitivity. The basis of such fear is difficult to determine but it is frequently present. As a consequence many of these patients suffer much, both in their phantasy and because of their phantasy; but so inhibited are they that they either do not manifest their feelings and withdraw further into a dream world, or they compensate for these fears by projection mechanisms and blame and attack others, whom their fancy has made responsible.

Miss C. E., aged twenty-nine years, was brought to the psychopathic hospital from her home because she attempted to kill her nurse by stabbing her in the back with a carving knife. The family history shows that one paternal uncle was in a state mental hospital for some years. The patient herself was a normal full-term baby, was never seriously ill, though she never had much endurance and was always easily tired. Her school work was normal, and she left college at the end of the second year, and entered business school. She had much talent in painting and drawing, and secured a clerical position at a university. She became interested in a professional man who asked her to marry, but she refused and a few months later he married someone else. She went with another young man for a while but soon stopped seeing him. At home she played the violin and taught herself to play the piano. She was a great reader, and seemed to enjoy athletics. She became interested in socialism and was bitterly criticized by members of her family and even told she was crazy for thinking as she did. At the age of twenty-four, she resigned her work saying "I'm too badly mixed up in it" and that she "could not tolerate the coarse stories" which were told in the office. She spoke of feeling inferior to members of the family, and said she wanted to live her own life—yet she made no move to do so. She was erratic and flighty, and at

times did not carry on a conversation, starting a sentence but not finishing it. She stayed up late at night reading. She cried without provocation. At the age of twenty-five she played her violin for a church service. Then she left the church and drove her car till it was out of gas. She knocked at a stranger's door and asked for assistance. It was recognized that she was ill and her parents were called. She talked disconnectly, and was so upset mentally that she was sent to a sanatorium. At first she was over-active and over-talkative, but soon she changed to violent outbursts of temper. After a trial at home, she was again sent to the sanatorium and then she remained in her room, lying in bed. She expressed antagonism towards her father, said she could not find her place in the world, talked at length about socialism, and said she saw white people going about as negroes, and children going about as automatons or robots. She was particularly irritable at the menstrual period and the gynecologist advised a cervical dilation, with but little effect on her behavior. She was returned home and adjusted at a superficial level for three years, living at home, taking trips with the family, but having no serious interests. At the age of twenty-eight, she began holding conversations with people when there was no one about, and then to talk about committing suicide. She was taken to a Christian Science home where she tried to choke the worker. A few days later the father, while reprimanding the patient for something, said, "It's just like sticking a knife into your mother's back when you do that." The following day, the nurse found the patient with a knife in her hand, and in the struggle that ensued the nurse fell to the floor whereupon the patient jabbed the knife into her back. She then called her father saying "I've done it." When taken to the hospital, she sat rigidly in bed, preoccupied, and when questioned about her act she said "I thought this woman wanted to die, because I want to die, too. I won't die even if I kill myself. I haven't got my work done yet."

At the hospital she was mute, resistive, unresponsive, and inactive. Her appearance was poor, she refused food and medicine. She sat for long periods of time in a slumped position, or wandered around, her body in a stooped position. When asked questions, she made motions of writing in the air. When, during the mental examination, she was asked "what is 5×5 " she replied "Green ice water" and to " 5×6 " she answered "Death." Again she remarked "One's name is automobile, and the other one's name is Keligen." When asked to whom she referred she said "My childrens—oh! no—it's all over now." "Is refusing to lie down on the railroad track a sin? This is Sunday night." Once she wrote: "Babies do not come through people's eyes or their voice boxes, nor are garters babies. Neither has a child ever been known to spring from the head of a man as the ancients used to believe of a certain goddess."

Insulin treatment resulted in a marked improvement in her state, but she was not considered completely cured.

Mannerisms, and stereotypes, often have their genesis in the symbolic and emotional storms centering within the patient. Thus one young man arose from his bed at 2 A.M. and began a series of high stepping bowing, and making peculiar gyrations with his hands and body. His actions were entirely incomprehensible, but as explained on page 60 (case E. G.) the reactions were the

result of a distorted thought process in which he was "trapped" and frightened. To this patient, the "witch" represented the young woman of whom he had been enamoured, although he had never even spoken to her, and the electric shocks were the symbolic expression of the tingling skin sensations of sexual excitement.

The production of delusions and hallucinations follows directly from the patient's withdrawal from reality, his need to find some "rationalization" for his vague fears and desires, and the inability to accept as his own the "sinful" or "horrible" ideas which he has. Thus the patient who has always been highly moral, and moralistic, who has refused even to consider anything related to sex, "hears" voices which accuse him of all sorts of sex acts. In other words, he has dissociated the wishes from himself, and projected them into the outside world. So clear do these outside thoughts become that they are actually "heard." When to some patients, the dissociation occurs, but is not split off enough, the patient insists that the ideas that he has are not his, that these ideas were planted in his mind by someone else, or that they originated by themselves (autochthonous ideas). In an earlier stage, patients are aware of their "awful" thoughts which they cannot accept, and are concerned lest others find out about them; the patients then complain that their "minds are being read by some machine" or by mental telepathy. When the patients express some of their basic wishes, either directly or symbolically, they cannot tolerate the idea of doing so, and so complain that they were "hypnotized" or that someone was controlling their mind and making them do these things.

Mrs. R. G., aged sixty years, had always been nervous, "high strung," and poorly adjusted in getting along with other persons. Even from childhood she had been considered as peculiar and hard to please. She was married, had two sons to whom she was devoted, but led a sheltered existence relying upon her husband; she was "lost" when any real responsibility, physical or mental, arose. She was asocial, was a good housekeeper, had a violent temper and had no interests other than her home. Menopause occurred at the age of forty-seven and was accompanied by an exacerbation of her usual nervousness. Otherwise she was well until the age of fifty-eight when she developed insomnia, had frequent crying spells, and became suspicious of everyone. At first she accused her dentist of purposely destroying her tooth structure, and removing gold from her bridges. Then she accused her physician of trying to poison her with bromides which were "to prevent sleep," then she accused her husband of "wanting to get rid of me." She left to live with relatives, returning when she became suspicious of them too. She made violent scenes at home. Physical examination was negative except for a mild hypertension.

After electric shock therapy (14 treatments were given) the patient complained of weakness and of loss of memory. However, her delusions dis-

appeared, and when her memory returned within two months after treatment she appeared normal. There was no recurrence of the psychotic symptoms.

The delusions which arise may be fragmentary in nature and may be rationalizations for individual disturbances within the patient's own consciousness, as are those mentioned in the previous paragraph. But where the patient is given to rationalization, or when it is pressed for explanations for his misconceptions, he will soon develop delusions which "hang together" and which are said to be systematized. In persons who are able to adjust in society for a long period of time before being hospitalized, one finds these delusions to be so well systematized that the patient is often said to have a "true paranoia," whereas the paranoid elements are part of a slowly developing schizophrenia, which often does not show itself in all its colors till later in life.

There are four main varieties of schizophrenia, all of which have in common many of the symptoms mentioned above. These varieties are not sharp and distinct but merge into one another.

Simple Schizophrenia.—Simple schizophrenia (schiz: to split or divide, and phrenia: mind) is characterized mainly by a general let-down in interest and activity. Ambition is markedly lacking, and these patients are often called lazy. The person is a day-dreamer, is unable to concentrate, is often moody, irritable, and asocial. Masturbation is marked, and normal sex contact rare. In the home of understanding parents, such a patient may remain for years doing no work, rarely going out with people yet never harming others. The illness begins in adolescence, and paranoid ideas develop much later.

Hebephrenic Schizophrenia.—Hebephrenic schizophrenia (hebe: puberty, phrenic: mind) is characterized by silly, childish behavior, with vivid hallucinations, marked incoherence in thinking, violent emotional outbursts, alternating periods of excitement and periods of tearfulness. Before the onset of the psychosis such persons are regarded as queer and are shallow in their emotional response. This group deteriorates rather quickly, and "late symptoms" occur early.

Catatonic Schizophrenia.—Catatonic schizophrenia (cata: down, and tonus: tone or tension) is characterized by stupor, the patients being mute, refusing to eat, and showing signs of waxy flexibility. There are alternating periods of depression, excitement, and stupor. The symptoms tend to come on more acutely than in the other schizophrenic syndromes, and are accompanied by intense negativism¹ (doing the opposite of what is wanted), stero-

¹ *Vide* p. 71.

typy (performing the same actions over and over), echolalia (saying the same words repeatedly), retention of urine and feces, and apparently a complete disinterest in their surroundings.

Paranoid Schizophrenia.—Paranoid schizophrenia (paranoia: madness), is characterized by the tendency to develop the so-called persecution complex. The symptoms tend to develop later in life than they do in the former groups. Suspiciousness gradually hardens into delusions of persecution. These delusions at first may concern many different topics, but as time goes by the patient begins to connect them all into one system. These systematized delusions are often reasoned out paralogically (*i. e.*, by illogical analogies; *e. g.*, since all men are animals, therefore, all animals are men), and untrained persons such as juries will often insist that such a person is not psychotic. One patient, for example, said that gas was put into his room and that electricity was passed through his body, but he could give no reason for his accusation. Sometime later, however, he fitted all he had said into a story according to which he was being persecuted by a gang because he knew some secrets about them and they had the hospital surrounded by men whom he could see dodging behind trees. These patients may be gainfully employed and able to take care of their ordinary tasks without interference by these delusions until they become acute. It is persons of this group who may shoot a passer-by whom they believe to be a persecutor. Gradually these patients deteriorate, develop mannerisms and marked incoherence in their reasoning, although in a mental institution they may be able to perform adequately many routine duties.

THERAPY

Prophylactic therapy is difficult to suggest for we know so little about the hereditary and constitutional forces. Even the effect of the environment is not clearly understood. No disease process has been isolated that can be prevented.

Early recognition of schizophrenic symptoms is important. As in any medical situation, the earlier the diagnosis is made the better are the chances of recovery. Eccentric behavior or idiosyncrasies should be looked into; for whereas in many cases they may be within the limits of normalcy, in many they may be the first signs of a psychosis. Of importance to study is any change in personality which occurs without apparent reason. In many such cases simple psychotherapy (mental hygiene) may prevent the disease from going further.

Normal mental hygiene should be used by everyone, especially by those who have personality difficulties. Mental hygiene con-

sists of a healthy attitude toward life and its problems. It means facing facts directly and courageously,¹ solving them without undue fear, hate, or insecurity; it means being human, flexible,² and relaxed.³ It means self-discipline without repression,⁴ avoidance of oversensitivity,⁵ and tolerance of one's faults while continuing to strive for their correction. Rigid rules of thought and action are best avoided.

Active Therapy.—There are several forms of *shock therapy* used which will be discussed in the next chapter. In general, it may be said that the percentage of cure is in proportion to the earliness of the treatment. Patients treated within six months of their breakdown can be expected to recover in from 70 to 80 per cent of instances, and these cures are apparently complete and permanent, though our experience with these treatments is still young. Moreover, (a) chemotherapy must be supported by (b) psychotherapy, which is another way of saying that in addition to changing the physical state of the patient his methods of thinking and living must also be changed.

When the diagnosis is made, the patient should be placed in a sanitarium or adequately equipped hospital. The windows should be protected because of the danger of suicide, but the room should be as pleasant as possible. A cheerful and intelligent nurse is of great help.⁶ A general diet and ordinary routine are instituted. A careful physical examination and laboratory tests will rule out any organic pathology. If one of the shock therapies is decided on, the family must be told of the patient's distaste of the treatment and that it is necessary to complete a full course of treatment regardless of the patient's objections.

Fever Therapy.—Fever therapy is far less effective in the treatment of the psychoses and is usually given by means of intravenous typhoid fever bacilli. In *prolonged sleep treatment* which is of doubtful value the patient is kept asleep for ten to fifteen days, being allowed to awaken only for food and elimination. Sodium amytal or phenobarbital or barbitol is commonly used. Enough sedative is given by mouth to keep the patient near coma.

Psychotherapy.—Psychologic therapy is of utmost importance. Without it much of the beneficial effect of the chemical therapy will go to waste. It must be remembered that the patient is confronted by many psychologic emotional difficulties which in themselves can be cleared up only by psychotherapy. One cannot stress this fact too strongly. *Many patients fail to recover after shock therapy because of the lack of adequate psychotherapy.*

¹ *Vide* p. 208 ff.

⁴ *Vide* p. 220.

² *Vide* p. 214.

⁵ *Vide* p. 63.

³ *Vide* p. 248.

⁶ *Vide* p. 229.

There are several principles to follow in schizophrenia as differentiated from neurosis. (1) Constant encouragement and not overly obvious praise must be given to the patient because of the self-accusations and self-condemnation present in so many of these patients. Reassurance must be frequent and strong. (2) It is unwise at first to force these patients to face their problems. Their peculiar ideas can be unraveled and straightened out only gradually, and only as the patient begins to develop some self-confidence. If one attempts to do too much in too short a period of time, these patients will often tend to harden and fix their delusions rather than soften and dissipate them. (3) The physician should never attempt to convince the patient that his delusions are false. The delusions themselves are the result of an underlying emotional turmoil. These delusions are peculiar thoughts but they exist because of the internal conflict. All the discussion in the world about the delusion will do very little to change the underlying conflict which is the source of the delusion. In actual practice, attempts to change and rationalize delusions will result in the patient's becoming more fixed and unyielding about them. (4) It is often wise to give these patients a psychologic or physiologic reason for some of their actions. Thus, for example, if a patient has peculiar pains in the body, it is well to explain; *e. g.*, that "under nervous tension muscles may contract and in so doing give rise to peculiar skin sensations"; and that these sensations will tend to disappear as the muscles relax. Reasoning of this sort gives the patient a feasible explanation and substitutes a more or less rational interpretation for the delusional theory he otherwise would advance.¹ (5) Most of these patients have conflicts, and it is well to generalize about the fact that conflicts are present in every person and that certain wishes, desires, or ideas are normal. For example: in many instances there is a great deal of sex conflict in these patients and one may tell them repeatedly that sex is a normal biologic drive; that it is present in every normal person; that whereas one may not be able to satisfy this drive except under conditions which society recognizes, it nevertheless is a normal tendency. In a similar vein, one must understand many of the conflicts of the patient and repeatedly reassure him on the fundamental nature and humanness of his desires. (6) Social and work activity should be encouraged as much as possible; but here again the patient must be coaxed and led rather than driven.

Mr. A. L., aged twenty-nine years, was discharged from a psychiatric hospital in the summer of 1935 as a deteriorated schizophrenic. He was mute; refused to speak; was violent; and force had to be used to get him to

¹ *Vide* p. 181.

eat, to undress for bed or bath; he had catalepsy, and stood for hours without moving; he spoke as though he was answering someone, when no one was about; he was incontinent of bowel and bladder, and even smeared his feces over the wall. When first seen in August, 1935, he spoke hardly at all, but told of voices which accused him of being a moron, and a criminal. The voices accused him of all sorts of antisocial and immoral acts. He did not know where they came from, but he felt that a certain doctor instigated them.

This patient was one of six sons, brought up by a devout and strict father. The father was kind and loving to his children, thereby earning their respect and admiration; but at the same time he demanded that they all follow his own most literal interpretation of the Bible. Several of his sons, including the patient, Arnold, went into the ministry. Arnold grew up to think and feel that almost every action of the human being was sinful and motivated by the devil. In his frame of mind, to go out with a girl was tempting the devil to his utmost. He worked his way through theological seminary, volunteered for the mission field, and was put in charge of a foreign mission. His work went well, he was tireless and devoted in his efforts, but the relative undress of the women natives disturbed him, and he felt with horror that his mind was contemplating unholy ideas. He threw himself feverishly into work, and slept little. He walked long distances, 20 miles on occasion, to fatigue himself and forget. The tension increased, for he could escape neither his tantalizing awareness of the women nor the excoriating accusations of his conscience. One afternoon in his cabin, he seized the colored maid in a frenzy and raped her. He stripped naked and ran out into the clearing, screaming with excitement. There followed other symptoms of an acute catatonic excitement. This incident occurred in 1934, and soon thereafter he developed mutism. All the voices he heard in his schizophrenic state, were those of persons whose opinion he cared for or feared; and they all accused him of immorality and degeneracy. They were projections of his own conscience.

Psychotherapy was begun¹ by making every effort to establish rapport with the patient.

When he was first seen in the sanitarium, no effort was made to analyze or criticize his behavior patterns or suggest activities. Instead I talked about many incidents and topics which had little relation to the patient, attempting to make the time pass as if there were ordinary conversation, even though the patient spoke hardly at all. After two weeks, he was permitted to return home, his family having been instructed in how to act. He was to be left entirely to his own devices, except for an occasional and not too persevering effort to have him enter into groups and activities about the house. No allusions were to be made to the past; and in every way the patient was to be treated as an ordinary member of the household and not as one to be looked after. Members of the family were seen as often as the patient, for the success of his treatment was dependent upon the family's intelligent cooperation.

When the patient came to the office, he was constantly encouraged as to his recovery from his illness and as to his future. The past, he was told, was to be regarded as a bad dream which he needed to forget. No effort was made, at first, to search out the underlying psychologic mechanisms; and

¹ At this time little was known concerning the shock therapies.

every attempt was made to give the patient a sense of security and to remove feelings of guilt and remorse. As time went by, explanations were given to him, first in generalities, and then specifically, about the universality of the sex drive, and its normalcy. Emphasis was placed on the normal basic nature of the impulse, and dispassionate explanations were given as to why society has developed a code of morals in regard to sex. He was made to feel that his impulse was normal, and that his standards were high. It was a moment of weakness which had caused his digression from his standards, but he was reminded of his preachings about the humanness of errors. As psychotherapy progressed, his complaint about the accusing voices changed so that in November, 1935, he came to speak of "a scroll" which was in the back of his brain, and which kept constantly repeating to him the accusations formerly "heard." This scroll was like a phonograph record, with the difference that sometimes it was acute and irritating to distraction, and at other times it was a soft sibilant whisper. This bringing of the projection mechanism nearer to the self indicated a distinct improvement.

When the patient brought up various delusional ideas, they were not discussed, or were minimized as to their significance. No attempt was made to convince the patient that he was wrong. Where possible, some pseudo-scientific reason was given to form a rational excuse. For example, he complained of someone's shooting electricity down his legs. Although no pathology could be discerned, the patient was told that the malaria which he might have had in his foreign service could have affected the condition of his skin and that the condition would clear up in time. The patient accepted this explanation, and except for an occasional mention of it later, made no connection between his leg and "someone shooting electricity down it." In February, 1936, he remarked, "When I'm active, the scroll doesn't bother me, but when I'm quiet it keeps going. Much of the time the scroll seems to have disappeared but there is a constant ticking sound in its place, just as if there was a clock in my head. **BESIDES I CAN'T FORGET MY PAST.**" This last sentence was particularly significant, for it indicated that the patient had removed his guilt feelings and ideas of sin, away from the projection mechanism of voices, or scrolls, and had brought himself to face these feelings and ideas directly. The process of recovery was slow, and just as important as the psychotherapy (the patient was seen once a week) was the factor of time. In June, 1936, the patient stated, "I don't hear the scroll, but my conscience always keeps bothering me about my past, and it becomes so intense at times, that the scroll sometimes takes over and keeps on saying what my conscience said." This spontaneous recognition of and the alteration between conscience and "scroll" indicated to the patient his tendency to dissociate and split off his ideas from himself. The patient was definitely on the road toward getting well. The general formulations of mental hygiene were constantly applied. General discussions of the driving forces in life, of different methods of meeting life situations, of the need for self-tolerance while exercising self-correction, were carefully but continually made. The attitude adopted was of giving the patient understanding, rather than that of urging correction; for understanding in itself is corrective. The patient was urged, and his family encouraged to have him form social contacts, and his brothers asked him to help in all sorts of chores, in an effort to keep him occupied. For a while he filched money from purses about the house but it was deemed wisest not to shame the patient by bringing his actions to his attention. Instead, his spending allowance was increased, and in a short time the stealing ceased.

In August, 1936, the patient came into the office with a red, non-itching maculo-papular rash over his entire body. A Wassermann test came back four plus. The patient admitted having had sexual contact with some prostitutes.

To a sensitive person as this patient was, such a shock was terrific. The "scroll" returned to its previous function. "It keeps on saying, 'It's all your own fault—it's your punishment for the terrible sins you committed in the past.'" Every effort was made to prevent the patient from becoming too remorseful, and although his sex contact was not condoned, he was taught to regard it as "a human error." By November, 1936, the scroll had again disappeared, and "I'm doing my best not to let the past bother my conscience." He continued to become more interested in work and persons, and by the spring of 1937 procured a temporary position. By the summer he was working steadily and at the time of the present writing (1942) was normal and had had no relapses.

GROUP PSYCHOTHERAPY

Such responses to individual psychotherapy are very encouraging; but the time requisite for such procedure makes it often an impractical technique. When one deals with large groups of patients, as in state hospitals or in clinics, such individual attention is limited to a few selected patients. To deal with this situation group psychotherapy has been evolved. Patients are gathered into small groups and therapy is given to all simultaneously. The results are very good. Group therapy aids the patient not only by: (1) giving him instruction in mental hygiene concepts, but also, (2) by demonstrating to him that he is not the only person with neurotic complaints and thus alleviating much of his needless self-criticism. Moreover, (3) the activity of the group as a social unit makes many of these patients less shy and more interested in activities external to themselves.

There are various techniques which can be used, one excellent method being to obtain a psychiatric history before permitting the patient to join the group. Then the physician knowing the particular cases can in the group meetings, guide the discussions to deal with specific maladjustments; and the patients can be encouraged to talk about their own problems before the others. Skillful handling of the topic can prevent embarrassment, and the fact that each person discusses his problem creates a community of feeling which makes general discussion easier.

As a rule the sexes are separated in the therapeutic groups and members are encouraged to participate in social activities. Group psychotherapy for patients suffering from alcoholism is very helpful in preventing recurrences; each member's knowing of the susceptibilities and needs of himself exercises a prophylactic effect on the others who may be tempted to relapse.

CHAPTER XVIII

SHOCK THERAPIES

OF the innumerable therapies tried in an effort to "cure" schizophrenia or manic-depressive psychosis, few have met with so much success as the shock therapies. Initially, these therapies seemed like so many others—flashes by enthusiastic workers, flashes which would quickly die out. Despite the very shaky premises upon which these therapies were begun, the results have been remarkable. Any experienced investigator will agree that as a result of these therapies many psychotic patients have been returned to an apparently normal state, and have remained there. The treatments are far from being perfected, and it may be that when we learn more as to the mechanism of their action and the mechanism of the disease process we shall discard the present forms of "shock" treatment; but at the present they offer the best chance for the amelioration or cure of otherwise hopeless cases.

The shock therapies are poorly named, but a better, because more etiologic, name has yet to be advanced. Certainly the patient's emotions are shocked, and the examiner or onlooker is also shocked emotionally during the first witnessing of these treatments. Yet the mortality rate is extremely low, the number of accidents in experienced hands extremely few, and the percentage of recoveries far greater than with any other form of treatment hitherto used. There are essentially two forms of this kind of treatment: insulin shock therapy, and convulsive shock therapy. By the latter is usually meant metrazol or electric shock therapy.

INSULIN SHOCK TREATMENT

Hypoglycemic states have been well known and understood for years, and wide experience with diabetic patients has made most physicians familiar with the symptoms which result from "too much" insulin. Insulin has been widely used as a means of increasing the patient's appetite; and small doses, from 5 to 15 units shortly before mealtime, have been very beneficial. However, shock doses were avoided. Manfred Sakel used large doses of insulin for patients suffering from drug addiction and noted that many of these patients became more euphoric and "extrovert" in

their characteristics. He, therefore, decided to try the same therapy in schizophrenic patients. The result of this experimentation was the insulin shock treatment. The principle of this treatment is to inject insulin (usually in the morning before breakfast), withholding food for several hours (usually for four hours) and then terminate the hypoglycemic state by the use of sugar and food. The dose of insulin is initially minimal but is increased daily until the patient develops coma. That dose is then repeated as the coma dose, and reduced or increased as necessary to obtain coma. The patient is permitted to remain in coma for a varying period of time (usually one-half to one hour) and then brought to consciousness by gastric or intravenous glucose. The comas are repeated daily, the usual course of treatment consisting of fifteen to thirty coma doses.

As a rule, when insulin is injected intramuscularly, hypoglycemic symptoms will appear in forty-five to fifty minutes. If insulin is injected intravenously, the time required for symptom appearance is appreciably shorter. The patient who has reached the coma dose is quite comfortable during the first half hour (although there are tremendous individual variations) and then becomes increasingly restless. Perspiration is marked and increases so that the bed sheets are often soakingly wet. (In "dry" shock, perspiration is at a minimum.) Gradually, the patient becomes sleepy and less responsive. He becomes "weak," and frequently complains of "feeling funny." The body temperature drops markedly, often being about 94°, and on occasion being as low as 89°. Signs of confusion then occur, the patient slurs his speech, becomes very restless, grasps at persons near him, mumbles words, and often with but little sign of comprehension repeats questions which are asked of him. The physical response to any stimulus is violent, uncontrolled, and tends to be repeated over and over. Salivation is often marked. Gradually, the hypoglycemia increases, and the blood sugar reaches about 30 mg. per cent after one and one-half hours. Usually, after the beginning of the third hour, myoclonic and clonic twitchings occur; athetoid movements appear; peculiar movements, such as puckering the lips and grimaces are made, and convulsive seizures may be present. During this stage the pupils are dilated and react to light, and the pulse rate is increased. When coma has been present for about an hour, the stupor is very deep and the patient cannot be aroused by any stimulus, there is a coarse tremor, the pupils tend to become small, and there occur signs of pyramidal tract involvement, such as Babinski,

Rossolimo, and Hoffman reflexes. The corneal and pharyngeal reflexes are absent. In the fourth to fifth hour of shock, the pupils are pin-point, the pulse is slow, there is marked pallor, the respiration is depressed; and at this dangerous state the patient may go into an intractable coma from which arousal is difficult if not impossible.

The amount of insulin necessary to produce coma varies greatly. There seems to be no relationship between the coma dose and the body weight or well being. The average coma dose is about 150 units; but coma has occurred in persons with as little as 17 units of insulin (in one injection). The accepted procedure (though there are many variations) is to give 15 units of insulin the first day at 7 A.M. and to terminate the insulin state by a regular meal at 11 A.M. Some physicians recommend termination at the end of the fifth hour, at 12 noon. The dose of insulin is increased by 10 units each day, until the coma dose is reached. If the dose of insulin required for coma is more than 250 units, it is advisable to attempt the alternating method. In this method, one alternates between the maximal dose of 250 units and a minimal dose of 30 units, so that on the first day 250 units are used; on the second day 30 units; on the third, 250 units; and so on until coma is reached. Again, there are many variations in the technique of this alternation: one can on the third day give 125 units, and on the fourth 250, and drop back to the cycle on the fifth day with 30 units. Just why the dropping of the dosage to half the amount which failed to produce coma eventually brings about coma is not clearly understood. Moreover, after the initial coma dose has been found it is advisable to decrease the dosage by 10 units the following day; for many patients will be found to require a much higher dose for the initial coma than they do later. Should the patient still develop coma on the lower dose, the next day's amount should again be reduced; should the patient not develop coma, or should he awaken from coma spontaneously the higher dosage should be returned to.

The amount of insulin injected seems to have little deleterious effect, provided ample care is taken. Thus in one of my patients I found the initial coma dose to be 150 units which developed two and one-half hours after the injection; and in an experiment on the effect of oxygen-lack in insulin patients, I increased the dosage of insulin daily until 1000 units was given at one time. In these later doses the patient became comatose in one and one-half hours (the coma appeared when the blood sugar was 28 mg. per

cent) but revived immediately when sugar was introduced into the stomach. There was a tendency towards a secondary reaction several hours later, but this was easily controlled, and in no other way were there any abnormal effects from the insulin.

The time of termination of the treatment should be, as stated above, four hours after the injection of insulin. However, when the patient becomes comatose the treatment should be terminated from one-half to one hour after the onset of coma. The exact onset of coma is not easy to determine; but when the patient no longer responds to questions, despite such stimulation as shaking, or pin-pricks, coma may be said to be present. There does not seem to be a definite rule as to what time it is best to terminate the treatment; but to many observers, it appears that the beneficial effects from the therapy come from the comatose state, and, as a consequence, some authors favor prolonged coma. Indeed, one author advocates protracted coma for as long as eight hours; but most workers terminate the coma before the end of the fifth hour of treatment—that is, within one to two hours after the onset of coma. The most important danger of protracted coma is that patients will be unable to return to normal despite enormous amounts of sugar injected intravenously and given in other ways. The prolonged coma frequently ends in death, and the failure to recover has been attributed to a state of complete exhaustion of the cells in the medulla oblongata.

There may be convulsions present during the coma; but contrary to Sakel's initial fears, these convulsions are usually found to be beneficial to the patient. Indeed, some authors give metrazol or use electric shock for patients who are in insulin coma. One must be careful that the convulsions are typical epileptoid in character, representing stimulation of the cerebral cortex; should the convulsions become tetanoid in type, representing a terminal stage of coma, the treatment should be interrupted immediately.

One may terminate the coma by the use of sugar. Sugar, is best given through a nasal tube. The amount of sugar varies, the original authors suggesting the use of 2 grams of ordinary sugar (sucrose) for every unit of insulin. I much prefer the use of 1 gram of sugar per unit of insulin, and if the total amount of insulin exceeds 150 units, no more than 150 grams of sugar are given. This sugar is dissolved in about one pint of fruit juice. If larger amounts of sugar are used, two complications result: there is a tendency towards nausea and vomiting, and, very often, concentrated sugar is not absorbed quickly from the stomach. In the

latter case, I have not infrequently been able to revive a patient who did not respond after having 400 grams of sugar in the stomach, by the simple expedient of adding, through the nasal tube, a half pint of water, the water diluting the sugar sufficiently to permit absorption to take place. Usually, the patient revives within a few minutes after the administration of the sugar; and although the consciousness is clouded for a while, and the patient may be restless, it is possible to have him sit up and converse intelligently within fifteen minutes to half an hour. As soon as possible after the awakening the patient is given "breakfast" which consists of a highly caloric meal of eggs, milk and cream, fruit juice, bacon, and toast.

Though the administration of sugar through the nasal tube is simple, it carries with it the possible danger of inserting the tube into the lung, and the danger of aspiration of fluid into the lung. The cough reflex is diminished or absent, and the insertion of the tube into the lungs is a common phenomenon. It is of value, therefore, to aspirate from the tube and to test the fluid with litmus paper to ascertain that it comes from the stomach. Similarly, auscultation over the stomach while squeezing air through the tube will give a characteristic bubbling sound if the tube is in the stomach. The sugar solution should be warm to facilitate absorption; and when the solution is in the stomach, the nasal tube should be pinched as it is withdrawn in order to avoid the spilling of any fluid into the trachea. The patient should be reclining on a back-rest when the nasal tube is inserted so that regurgitation will be less easy and the fluid will not "run back."

If the patient does not awaken shortly after the administration of sugar, or should there be any reason (such as a failing cardiovascular apparatus, or status epilepticus, or, a terminal stage of coma) for an immediate termination of the treatment, intravenous glucose, (20 cc. of a 50 per cent solution) should be injected slowly. Frequently, the patient will awaken from his coma while the needle is still in the vein. The patient should immediately be given sugar solution to drink in order to maintain a normal blood sugar. The frequent use of intravenous glucose is to be avoided because of the tendency of sclerosis of the veins which, when needed, will then be difficult to find.

In the event that the patient does not respond at once, or should it be difficult to enter a vein, as is not infrequently the case in obese patients, 1 cc. of adrenalin should be used; and the consequent stimulation of the liver to send sugar into the blood stream will

often waken the patient for a sufficient length of time to enable the sugar solution to be given by mouth.

The average length of treatment is determined not so much by the number of days of insulin treatment as by the number of coma doses. Usually 20 to 30 coma doses are given, but the individual case should determine the number. One may with but little danger give up to 60 comas or even more provided the patient is closely watched, and the treatment terminated in the presence of any untoward signs. Usually, the termination can be complete and sudden without a period of decreasing insulin. More important than the number of treatments is the patient's reaction. It will be noticed that the patient becomes quieter, is less tense, acts in a sociable manner, and seems to be more "normal" as the improvement occurs; and the treatment is continued until the patient appears to be completely normal. We may insert here, as we have suggested under Treatment of Schizophrenic Patients,¹ that one of the most important factors in the patient's getting well and remaining so is the accompanying psychotherapy, and that the reason for the apparent failure of so much of insulin shock therapy lies in the failure to deal with the psychologic aspect of the disease process.

The number of complications which may result from insulin shock treatment include local irritations if insulin is repeatedly injected in the same area, and allergic phenomena, consisting of the usual non-specific reactions of redness, itching, urticaria, edema, tachycardia, vomiting, etc. Often this allergic phenomenon may result from one brand of insulin and not from another; after a few days' rest one can often with complete success continue with another firm's insulin. Mild irregularities of pulse are frequent but disappear shortly after the treatment is terminated. Acute myocardial failure and circulatory collapse have been reported but are infrequent and should be treated by the usual cardiac stimulants. Respiratory failure may occur suddenly, and the very suddenness of the failure is a warning of the imperative necessity that no patient must be left alone for a moment. In one case, for example, the nurse was sitting at her table in the patient's room, facing the patient who seemed to be doing well. When the nurse looked up a moment later from her chart the patient had ceased breathing. Such sudden collapses are not uncommon; and prompt action with the injection of lobeline and artificial respiration, quickly followed by intravenous glucose was sufficient to revive the patient. Oxygen tanks (preferably oxygen

¹ *Vide* p. 435.

with 5 per cent carbon dioxide) should be immediately available where needed. Pulmonary edema is not infrequent and can be treated by small doses of atropine; laryngospasm may occur and requires immediate termination of the treatment.

A most common complication is pulmonary aspiration with subsequent pneumonia or lung abscess. Much can be done prophylactically by care in the insertion of the nasal tube, by the use of the intravenous method of terminating the coma should vomiting be frequent, by keeping the head turned to one side during coma to prevent aspiration of mucus. When this complication occurs, it should be treated by the usual procedures.

One of the most serious and disturbing complications is the prolonged coma. This complication becomes evident when the patient fails to be aroused despite all the sugar one can pour into him. The cause of prolonged coma is unknown; presumably it results from exhaustion of the medullary center, and hence is more common when the therapeutic coma is prolonged beyond an hour. The sugar which is thrown into the system may counteract the insulin present, but the nerve cells are apparently so damaged that their recovery is delayed or impossible. Death frequently occurs in such states; and since the probability of fatality is proportionate to the length of time the patient is kept in therapeutic coma, it is advisable to terminate the coma after one-half to one hour. When such a prolonged coma is reached, the patient should be given sugar to the amount of 2 grams for each unit of insulin. More than that amount should be avoided, for too much sugar may cause pancreatic hyperinsulinism. In addition heat, adrenalin, intravenous sodium chloride, potassium chloride, and large doses of vitamin B should be given parenterally. If no response occurs, blood transfusion may be tried. It is important to continue with stimulants, saline solutions, and transfusions; for some patients may be in coma for more than a week and still make a complete recovery.

If it is desired to use prolonged coma in therapy, the irreversible form may be avoided by administering 10 to 50 grams of sugar (by a residual nasal tube) each hour after coma has set in. This small amount of sugar may prevent complete exhaustion of the medullary centers even though it is inadequate to arouse the patient. In addition, large doses of vitamin B complex are advised for all patients undergoing insulin treatment.

Delayed after-reactions tend to take place from two to four hours after the termination of the treatment. These should be

carefully watched for, inasmuch as the patient may have epileptic attacks, or may go into a prolonged coma. If the patient seems weak or clammy after the treatment he should immediately be given sugared fruit juice. Patients should be taught to carry candy bars with them and to eat at the first sign of any hypoglycemic symptoms.

There are at least two modifications of the above form of treatment. One is the ambulatory insulin therapy in which patients are given 40 units of insulin at 7 A.M. and permitted to walk about the ward until 11 A.M. when food is given them. As much insulin should be given as is possible without producing symptoms which require bed rest. Such therapy must continue for many months, and, at present, it seems that though improvement may occur, "cures" are infrequent.

The second modification is the use of amytal in large doses (9 grains) immediately before the administration of insulin. In some cases the dose of insulin has been found to be about one-half that otherwise needed for the same patient. The advantages of this variation of the insulin treatment are in terms of the saving of insulin and the quicker development of coma in resistant cases. Moreover, since less insulin is given, it is possible to counteract its effects more easily.

The method by which insulin produces its results is not as yet understood. There is much evidence which points to an intracellular anoxia as being the important element, and indications that the compensatory cellular reaction brings about the improvement. However, pathologic studies in animals and in fatal human cases reveal that there is marked damage to the cells in the cortex and the hippocampus, and that much of this damage to the ganglion cells is irreversible. The cells are damaged and glial tissue takes their place. In the patient who recovers from the coma therapy, there seems to be no demonstrable loss in intelligence or in any personality function, and the brain seems to be able to return to what appears to be normal functioning despite the missing cells. In patients who have had so many comas that they appear to be demented for days after the treatment, complete recovery of intellectual functions is the rule. It appears that the stimulation of the sympathetic and parasympathetic centers may well be the result of a quantitative diminution of the inhibiting power of the cerebral cortex; the destroyed or injured cortical cells "releasing" (in the sense of Hughlings Jackson) the more primitive dien-

cephalic centers. Clinically too, the improvement of the schizophrenic patient appears to be bound up with the improved activity of the autonomic nervous system—the blood sugar and the blood pressure tend to be higher in schizophrenic patients who have recovered after insulin treatment than they were before the treatment.

Prognosis.—The rate of improvement in schizophrenic patients following insulin therapy varies directly with the amount of constitutional predisposition, with the duration of the illness, and with the amount of psychotherapy. One can determine the constitutional predisposition only directly. Such factors as: (1) a well balanced prepsychotic personality, (2) an acute onset, especially in the (3) presence of an obvious precipitating factor, together with such evidences of strong emotional tones, as (4) marked affect in the psychotic symptoms, or even (5) frank depressions or neuroses are the bases on which a prognosis may be made. The more such positive factors are present the more likely is the patient to recover, the less or more negative they are the more guarded the prognosis. More simply put, the more adjusted and the more extrovert (in the sense of adjustment to reality) the person before the illness, the more likely is he to return to a normal state after treatment.

The duration of the illness is of utmost importance. Initially it was stated that 90 per cent of these patients recovered if they were treated during the first six months of their illness, and that only 25 per cent recovered if they were treated after two years of illness. While these figures do not hold today, the general statement is true: treatment within the first few months of illness will result in a majority of schizophrenic patients improving or recovering; whereas after two years only a small minority will be improved. Without knowledge of other methods in the treatment of schizophrenia, it seems highly advisable to suggest insulin treatment early in the illness.

Finally, the use of psychotherapy is invaluable and, indeed, often makes the difference between success and failure in the treatment of these cases. Many of these patients are accustomed to live in a world of phantasy, and every effort must be made to acquaint them both with the importance this element had in the production of their illness and with the need for living in and dealing more directly with reality. Many of these patients are full of inhibitions, of fears, and misconceptions; and psychotherapy.

will relieve this abnormal state and restore a balanced perspective. The case cited on page 437 shows what occasionally may be done by the use of psychotherapy alone.

One prognostic test which seems of value is the sodium amytal-caffeine method. In this procedure caffeine, $7\frac{1}{2}$ grains, is given intramuscularly, and ten minutes later sodium amytal is injected intravenously. The sodium amytal solution contains $7\frac{1}{2}$ grains in 10 cc. of sterile water, and it is injected at the rate of 1 cc. per minute until the patient just becomes drowsy and thick of speech. One keeps questioning the patient during the injection, and ceases injecting when the patient begins to respond more freely to conversation. At that point one endeavors to ascertain what "the patient is thinking of" and "what he is worried about." Those patients who will talk freely and coherently tend to have a good prognosis under insulin therapy.

Some authors do not use the caffeine, but use sodium amytal alone. While the mechanism of action is poorly understood, it is probable that the toxic effect of the drug upon the cerebral cortex acts to remove inhibitions, and thus facilitates rapport; where such release of inhibitions does not occur, the constitutional predisposition is probably excessively great—hence, the poor prognosis.

The percentage of remissions of those patients who do recover is from 10 to 15 per cent; and these patients may do well with combined therapy (see page 460). The fatalities in insulin therapy may be high in inexperienced hands; but in clinics where the procedure has been carefully standardized the mortality rate is rarely over 1 per cent, and wherever great care is used, the figure is even lower.

CONVULSIVE SHOCK THERAPY

Differing from the insulin shock therapy is the whole group of agents which act by producing convulsions. These agents include metrazol, electric shock, picrotoxin, coriamytrin, azoman, ammonium chloride, camphor, methylguanidine, and others. Each has its peculiarities, and disadvantages; but the basic principle in all is that a convulsion is produced, and that the therapeutic result is a direct consequence of the stimulation of the brain which ends, among other things, in a convulsion. The present consensus is that the brain must be stimulated sufficiently, and "sufficiently" occurs at the point where convulsions occur. The two most commonly used methods are metrazol and electric shock.

Metrazol was first introduced by von Meduna in 1937 for the treatment of schizophrenia. Prior to the use of this drug he had

noted that schizophrenic patients rarely had epileptic attacks, and on occasion had even improved after epileptic attacks. He conceived of a fundamental difference between the two conditions, and followed the hypothesis that if one could produce epileptic-like attacks in schizophrenic patients one might obtain cures. Initially, he used camphor-in-oil intramuscularly, and obtained excellent results. However, the disadvantage of using this drug, the discomfort, local abscesses, and unpredictability of time of seizure led to a search for a better chemical agent, and metrazol (penta-methylene-tetrazol or cardiazol) was successfully used.

The improvement rate in schizophrenic patients was claimed to be very high during the early work; and although it still has an important role in the therapy of schizophrenia, it has been found to be far more effective in the depressive psychoses, especially the agitated depressions (involuntional melancholias).¹

Usually, the metrazol or electric shock treatment is administered in the morning before breakfast, the patient, whenever possible, not having had a sedative the night before. If a sedative had to be given the dosage of the convulsant must be increased. In order to avoid spinal fractures resulting from the sudden and severe spinal flexion during the convulsion, the patient is placed on a flat, hard bed or board, with a pillow or specially prepared Bradford frame to secure an arching of the back. In ordinary hospitals, the simplest procedure is to have the patient lie with his head to the foot of the bed and to elevate the foot rest of the hospital bed by some 14 turns. The patient's arms are folded across his chest and held there by an attendant—for in the seizure, the arms tend to be abducted and rotated in such fashion as to produce a dislocation. False teeth or removable bridge work is taken from the mouth, and a gag inserted. A very useful gag is the wedge-shaped rubber door stop wrapped in gauze. This gag is placed between the teeth and over the tongue to prevent the biting of the tongue. Simultaneously, the lower lip is loosened from beneath the gag to prevent its being bitten. The jaw is firmly held by the palm of the hand and pushed backward to prevent its dislocation. The shoulders are held down fairly firmly. This procedure can be carried out by two nurses or attendants. Care should be taken that the head and feet are free so that they will not catch in the bed during the convulsion. Some authors advise the holding of the legs and thighs, but I have not seen any dislocations or fractures despite the avoiding of holding them. Immediately after the cessation of the

¹ *Vide* p. 417.

convulsion, the patient is turned on his side so that his tongue will not fall back and obstruct breathing, and a pillow placed behind him to prevent his turning onto his back. If the jaw is dislocated it should be reduced immediately at the cessation of the convulsion, while the muscles are momentarily relaxed. The patient is then permitted to recover spontaneously.

If metrazol is used, it is given in a 10 per cent solution, intravenously. Since the effect of the drug is dependent upon the concentration which reaches the brain, a large-bore needle should be used and the drug injected rapidly. The first injection is 3 cc. for women and 4 cc. for men. If no convulsion results, the dosage is increased the next day by 1 cc. Eventually a convulsive dose level is reached, and may then be repeated every time a treatment is administered. In subsequent injections it will be found that some tolerance has been developed so that the convulsive dose may need to be further increased. In some instances when a convulsion does not occur, it is possible to wait ten minutes and then repeat the medication increased by 1 cc. On one occasion, I gave an extremely disturbed patient 10 cc. of metrazol with no convulsive effect, ten minutes later gave 11 cc., again with no effect, and ten minutes later 12 cc. with a good convulsive response. No harmful effects seemed to result. Usually the average dose is 5 to 6 cc.; and since brain pathology seems to be directly proportional to the size of the dose, it is advisable to use the smallest dose possible. The fatal dose is between 25 and 30 cc.

The patient is prepared as stated above, except that the arm used for the injection is held rigidly during the injection, given preferably into the cubital vein, and then folded immediately upon the chest as soon as the injection ceases. Usually, the convulsion begins in fifteen to twenty seconds after the injection, though there are wide variations. The convulsion begins with a clonic phase, followed by a tonic phase, and then again by a clonic one. The whole convulsion lasts about forty-five to fifty seconds and during it the patient does not breathe. Following the convulsion the patient breathes stertorously for a few minutes and then awakens in fifteen to thirty minutes.

The *electric shock therapy* was first described by Cerletti and Bini in 1937. The most widely used apparatus utilizes alternating current and is obtained simply by connecting the machine to the ordinary electric outlet of 60 cycle 110 to 120 volts. The apparatus is contained in a portable case, and consists usually of an ammeter, a voltmeter, and an automatic timer for interrupting the

current. Two flat metal electrodes, about 1 inch square, are applied to each temple, and held in place by an inch-wide rubber strap which encircles the head. Contact is made between the electrodes and the scalp by the application of electrode jelly, and by small pieces of gauze dipped in a salt solution. These electrodes are connected by wires to the apparatus. The patient is placed in the position described above, with the mouthpiece in place and with his arms folded, and jaw held. In most apparatus, one can then test the skin resistance, increasing the voltage so that 250 milliamperes will pass between the electrodes (and through the brain). The test current on the Offner apparatus is 1/300th the actual current so that the exact voltage is determined simply by manipulating a specially calibrated ammeter. The timer is then set for three tenths second, and when the treatment button is pressed, there is a discharge of 250 ma. through the head for three-tenths second. Immediately upon the pressing of the button, the patient goes into a tonic spasm, and the subsequent convulsion is practically identical with the one which follows the injection of metrazol. If there is no convulsion, the test amperage (*i. e.* 1/300th the actual dose) is increased to 300 ma. and at three-tenths second and the treatment current again started. If a convulsion does not occur, one increases the dosage of current by gradations of 25 ma. up to 400 ma. and the time for the current up to one second. Such high doses are rarely necessary. One can with little danger repeat several of these doses at a few minute intervals.

In the event patients are so resistant to the electric current as not to develop convulsions, one can facilitate the production of convulsions by forcing fluids the day before the treatment and administering an ampule of pitressin shortly before (five to ten minutes) the treatment.

The big disadvantage of metrazol is the fear which the patient has of the treatment. There is no pain; but during the twenty seconds between the injection of metrazol and the convulsion, the patient feels "like dying." This fear is so great that some patients have broken heavy doors in a frenzied effort to escape the treatment. Moreover, in obese patients there is difficulty in finding veins. These are the two main disadvantages which have resulted in a widespread change to the use of the far more simple and easily administered electric shock method. Moreover, if a patient does not get a full convulsive reaction from metrazol he is left very tense, fearful, agitated, and in need of strong sedatives; if a patient does not have a convulsion from the electric shock he has a complete

amnesia and is unaware of any disturbing sensation. There are other differences which at the present writing appear minor; in actual clinical practice the two convulsive agencies have the same ultimate effect, although there have been some suggestions of late that the fear element produced by metrazol may be of some value in treating selected apathetic, or "resigned" patients.

Although individual authors vary in their statistics of complications in the above treatments, both seem to have just as many, or rather just as few, fractures, dislocations, and fatalities. The difference in these two procedures is essentially one of technique rather than one of results.

Treatments should be given every other day. Some authors prescribe two treatments a week, and others suggest waiting to see what improvement occurs after each shock before administering the next. In private practice, I find that treatments are best administered every other day until the patient shows marked signs of "normalcy" on the day after the shock. If the patient is to remain well it is better to give one or two treatments after he appears to be returned to his normal state. In some instances mild manic reactions will occur, and treatment should then be postponed. Thus in post-infectious and post-operative psychoses¹ two or three treatments may result in a cure; while in more severe and unyielding cases one may give upward of twenty treatments. As a rule, if the patient is to get well, there will be marked improvement within the first fifteen treatments; if he does not show marked improvement with that number, the treatments may continue to twenty-five; but the prognosis is poor, and insulin or other therapy should be tried.

The contraindications to convulsive shock therapy are few indeed. The number of fatalities is less than one-third of one per cent. When the treatments were first used there were all sorts of contraindications suggested; but experience with this method in very young and very old persons (over seventy years of age), in physically well as well as those who have high blood pressure, arthritis, nephritis, arteriosclerosis, etc., indicate that there are but few limitations. Even cases of pregnancy advanced as far as five months have been able to withstand a course of fifteen shocks without abortion. Many patients who have marked essential hypertension show a marked relief and drop of blood pressure after a course of treatments. Such a drop in blood pressure without cardiac, renal, or other complications is extremely surpris-

¹ *Vide* pp. 381; 369, 392.

ing and is probably the result of the relief of psychologic and physiologic tension. Similarly, not a few of my patients suffering from mild forms of arthritis have, after the shock treatments, had their arthritic symptoms disappear. Again, it is difficult to ascribe the reason: it may be both the relief of tension which is generally recognized to play an important rôle in arthritis, and it may be the marked hypertension and consequent increased circulation of the joints. At any rate, the suggestions of improvement were so marked that it would be well to try this form of therapy in selected cases. Even in cases where there is E.K.G. evidence of myocardial damage, and where shock treatments were instituted at the insistence of the relatives that "something be done regardless of the danger" rather than have the patient "suffer so," it was found that the patients were able to withstand severe convulsions. In senile states with depression and in general paretics¹ (*q. v.*) such therapy has been found extremely effective.

Only in cases of actual tuberculosis of the lungs, or where there is coronary sclerosis does it appear that the dangers of the shock treatment are very great. Fulminating tuberculosis has occasionally been found shortly after a course of treatment; and, similarly, patients with marked coronary sclerosis may die on the table. With these two marked exceptions, however, one is relatively safe with this form of therapy.

There are several side associations to the usual convulsive treatment. During the convulsion and shortly after, one frequently is able to elicit such signs of pyramidal tract involvement as a Babinski or a Hoffman reflex. These pathologic signs, however, tend to disappear very quickly, much as they do in idiopathic epileptic attacks. Immediately after awakening, these patients may vomit, but this symptom is not common if the patient has avoided breakfast. Following the awakening from the convulsion, the patient is confused. Frequently, he does not know where he is, who is his doctor; and not uncommonly, the patient does not even remember having the treatment, and asks when the doctor is coming to give it. Within one hour the memory gradually returns to within normal limits. After several treatments, the return of memory to normal is more and more delayed, until some patients, after six to fifteen shocks, are extremely forgetful of names, of places, of things which they have done, of incidents in their daily life, and so forth. Formal mental tests do not seem to reveal any real deficiency despite this almost universal memory loss seen

¹ *Vide p. 369.*

clinically. This memory defect persists for several weeks, gradually clearing up and leaving the patient apparently completely normal.

Occasionally, this memory loss comes on very quickly, and is so complete as to leave almost a complete dementia. One patient, a young physician, suffering from a severe depression which necessitated leaving his practice, received two treatments and, in the words of his relatives, "was miraculously back to his normal self." Following the third treatment, however, he became completely demented, did not know who he was, where he lived, what the name of the attending physician was, nor any of the ordinary facts involving medicine. In addition, he had a mild form of sensory and motor aphasia. He put his trousers on as if they were his shirt, he urinated wherever he sat, he spoke hardly at all, he could not feed himself. He had signs of pyramidal tract involvement such as Babinski signs bilaterally, and exaggerated patellar reflexes. This state of almost complete dementia was present for several months, and then he began to improve. By the end of six months he had returned to his normal state in terms of intellectual and personality functions and with but a minimal trace of a depression.

This case illustrates the dangers involved, but demonstrates extremely well the great recovery powers of the brain, despite severe injury. This same damage and recuperation intellectually has been seen in young as well as old patients; and the patient's relatives can generally be assured of recovery of the intellectual faculties since much of the cortical damage is reversible.

A second frequent complication is extreme weakness following shock therapy. This weakness is the result of the violent muscular activity during a convulsion. Such weakness disappears in a short period of time. If the muscular contractions are very severe, there may be complaints of severe aching of the interscapular muscles, an aching resulting from muscle exertion or actual tearing of muscle fibers, or excessive strain on the muscle ligaments. Such muscular aches last for several weeks and gradually diminish in intensity.

A far less frequent complication, present in one to three per cent of the treated patients, is that of fractures. When the convulsive shock therapies first started, there were many records of fractures of the spinal column. These resulted from sudden flexion of the torso, and the compression of the anterior lips of the vertebral bodies. By hyperextending the spine before treatment, by placing the patient on a pillow or Bradford frame or other suitable con-

trivance, it is possible practically to eliminate these fractures of the spine.

However, fractures do occur elsewhere, particularly in the head of the humerus and the neck of the femur. Fractures may occur elsewhere, and need to be treated in the usual orthopedic fashion.

Dislocations also occur, the most common being that of the jaws. This dislocation can be prevented by pressure on the jaws during convulsion, the pressure being directed backward and upward. If a dislocation does occur, it should be reduced as soon after the cessation of convulsions as possible; the dislocation is easily reduced by inserting the thumbs inside the cheeks and pressing behind the third molar, down and back. Following such dislocation, the patient may complain of pain at the temporomandibular joint, a pain which quickly disappears. Dislocations of the shoulder joint are prevented by keeping the arms folded across the chest during the convulsion, and dislocation of the hip joint rarely occurs.

A technique has been developed to avoid fractures and to avoid convulsive movements: the use of curare, and of a curare-like drug—beta-erythroidin hydrochloride. Both of these drugs act by paralyzing the motor end plates, inactivating the acetylcholine. Prostigmine is an antagonist and is very effective in counteracting undue effects. The curare is injected very slowly in dilute solution (1 cc. having the equivalent of 10 mg. of the crude drug) intravenously. If erythroidin is used it is also injected intravenously, slowly, in a 10 per cent solution. One cc. is injected per minute, and the patient is asked to keep his arm elevated above his head and to talk in response to questions. The drug is injected at the rate of 1 cc. per minute by stopwatch; and when the patient's hand falls because he no longer has strength, when the speech becomes dysarthric and ptosis of the eyelids occur, the maximum effect desired has been reached. As soon as possible thereafter and not later than three minutes the metrazol is injected or the electric shock given. The result will be a grand mal seizure without the muscular movements, or with relatively mild movements. If there is any danger in terms of respiratory paralysis artificial respiration should be instituted and prostigmine, 2 cc. of a 1 to 2000 solution, should be given. The therapeutic effect of the convulsion is the same as without curare. However, the relative infrequency of complications have made the use of these paralyzing drugs inadvisable, unless there are fractures already present.

Another muscle paralyzing drug is ammonium sulphate in 25 per cent solution; 5 cc. are injected intravenously and immedi-

ately followed by the convulsive agent. This drug is less efficient than curare in preventing convulsions but may be used.

In apprehensive patients, the injection of 1/100 grain of hyoscine before the metrazol is given will relieve anxiety. In electric shock treatments, there is practically no anxiety and no sedative is needed.

The above convulsive treatments originally were used solely in mental institutions. However, it is possible to treat patients in ordinary hospitals and even ambulatory patients in this manner, and particularly with the electric shock methods from which there is some, but comparatively little anxiety. Quite frequently, I have depressed patients or even cooperative schizophrenic patients come to the hospital at eight o'clock in the morning, administer the electric shock treatment, and then permit them to go home about noon of the same day. These patients return voluntarily for their full course of treatment. Such ambulatory therapy enables many patients to obtain treatment when they would otherwise object to full time stay in a sanitarium, and also permits a normal environment while psychotherapy is given.

Prognosis.—The results from convulsive shock therapy depend not only upon the three factors listed in insulin shock therapy, but upon the kind of psychosis and upon the position of the patient in his depressive cycle. As to the kind of psychosis, it may be said that the agitated depressions (involutional melancolias) and the post-infectious psychoses recover the quickest, that depressions of the manic depressive type respond next best, and that schizophrenic patients respond least. In involutional melancolia "cures" may be obtained in over 90 per cent of the cases in a relatively few treatments. In schizophrenic patients who are ill less than six months, improvements may occur in 40 to 50 per cent of the cases. After two years of schizophrenic illness the improvements dwindle to less than 10 per cent of the cases treated.

The second factor, the position of the patient in his depression, may be illustrated by Figure 4. The depressive curve lasts anywhere from six months to four years according to individual circumstances. If the shock therapy is given early in the illness, the patient will need more treatments to have a recovery, and relapse rather rapidly after a period of several weeks. If the same patient were given the shock therapy toward the end of his illness he would need but few treatments and would tend to remain fairly well thereafter. Thus 10 treatments at *A* will result in a temporary improvement, following which the patient will relapse, although not quite so deeply as previously. He will continue

thereafter to follow the course of a regular depressive state, unless interrupted again by treatments. If the treatments are given at *B*, marked improvement and "recovery" may occur after three or four treatments, and the patient not only be well but be mildly manic. Despite this dependence upon the basic condition for recovery, many a patient can, by the judicious repetition of shock treatment (Fig. 6), be maintained in his normal environment. In the manic phase a similar situation may result as seen in Figure 5. It is well to reaffirm here, that in the manic phase it is inadvisable to use many convulsive shocks (preferably not more than 4 or 5), because the patients have a tendency to get worse with more treatments even though they may improve with the first few.

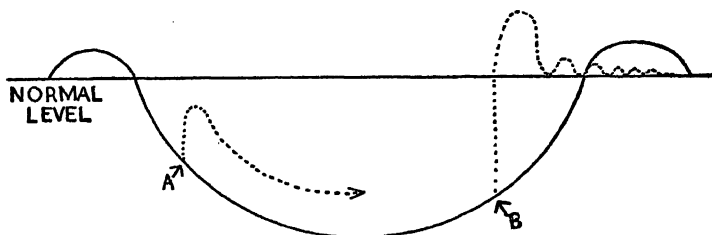


FIG. 4.—Response to therapy depends on patient's position in depressive curve. Electric shock therapy at *A* results in temporary improvement. Fewer treatments at *B* may result in a prompt "cure."

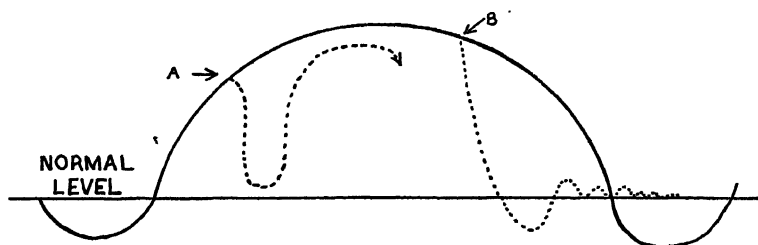


FIG. 5.—Response to therapy in a manic patient also depends on position in manic swing.

Pathologically, there are changes within the glial cells, dropping out of and disease of ganglion cells, and petechial hemorrhages. The severity of these changes is dependent upon the amount needed to produce a convulsion. Occasionally, as in the case cited,¹ a dose which previously was the minimal amount to produce a convulsion, may produce marked brain damage; but this situation is not the rule.

¹ *Vide* p. 456.

COMBINED INSULIN AND CONVULSIVE SHOCK THERAPY

Many workers now use the combined method, wherein a convulsive state is induced while the patient is in the early period of insulin coma. If metrazol is used, 1 to 2 cc. may be all that is necessary; and if electric shock is used, a much smaller than usual current is needed. The combination will often bring about results when one method alone will not; and in refractory cases this

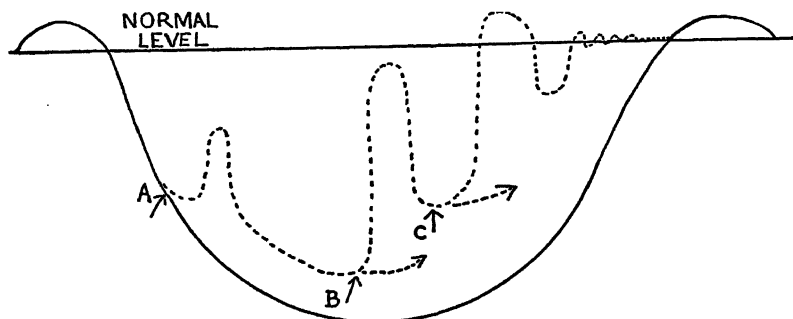


FIG. 6.—Repeated electric shock therapy in a depression. In a "typical" case 10 treatments may be given at A, 8 treatments at B, and 4 to 5 treatments at C with results as indicated. Repeated shock treatments at intervals may enable the patient to live away from a sanitarium during the depressive phase.

method should be used. If convulsions occur spontaneously no effort should be made to cease the treatment unless untoward symptoms occur. Not infrequently, the patient will awaken after a convulsion, but if left alone he will return to the comatose state. Great care, however, must be exercised, for dislocations are fairly frequent in the spontaneous convulsions.

PREFRONTAL LOBOTOMY

In recent years Moniz in Europe and Freeman in America have introduced prefrontal lobotomies in the treatment of mental disorders. The technique consists of making burr holes near the coronal sutures, and then inserting a small "leucotome" or knife with a cutting wire loop with which sections of the frontal lobe are made. The hypothesis was formulated that the frontal lobes function in initiative and in foreseeing and planning activities. When this foreseeing is too intense, apprehension and tension result and a psychosis ensues. In such a psychosis, therefore, the cutting of tracts from the frontal lobes will diminish activity of the frontal lobe and thus reduce psychologic tension.

The immediate effects of the operation are the abolition of anxiety and nervous tension, a fall in pulse and blood pressure, flushing of the skin and perspiration, and finally drowsiness and stupor from which the patient can be aroused. For the subsequent few days there is urinary incontinence and sluggishness. A month later, the patient is still inactive, volunteers but little conversation, responds cooperatively, spends much time at simple duties such as dressing and bathing, and has a completely dispassionate attitude. Situations which previously aroused great emotional disturbance can be discussed objectively.

While the reasoning behind this procedure is still unclear and not generally acceptable, the favorable reports by the authors make it a subject for further investigation.

CHAPTER XIX

OTHER PSYCHOPATHIC STATES INCLUDING PSYCHOPATHIC PERSONALITY, DRUG ADDICTION, ALCOHOLISM, EPILEPSY, AND FEEBLE-MINDEDNESS

THERE are numerous methods other than those of the neuroses or psychoses by which the human being expresses maladjustment on his socio-psycho-biologic level. Some of these methods are socially acceptable, while others are frowned upon and may be severely dealt with by society.

In the following discussion of a few of the socially disapproved of and unhealthy reactions to life's difficulties, it will be apparent that the physician has no easy task in the differentiation of causes. Hereditary forces, congenital influences, early environmental training, existing stress whether it be internal unrest or social and economic pressure must all be carefully investigated as possible determinants.¹

PSYCHOPATHIC PERSONALITY

(Constitutional Psychopathic Inferior)

This classification of "psychopathic personality" is vaguely defined. It is in reality hardly more than a "wastebasket" in which are cluttered various groups which do not represent any clearcut etiology, pathology, or symptomatology. Some of the various groups are: habitual criminals, swindlers, kleptomaniacs, pyromaniacs, sexual psychopaths, malingerers, paranoid personalities, pathologic liars, sadistic personalities, prostitutes, chronic vagrants, and so forth. The causes of these various conditions are many; yet there are indications of three types of symptoms present in most of these conditions: (1) defective emotional control, such as occurs in children following encephalitis; (2) vicarious reactions to deep-seated emotional conflicts such as are found in the psychoneuroses; and (3) psychotic manifestations which are only occasionally severe enough to require institutionalization, and which may be in the direction of excessive mood swings, or in the form of paranoid traits. Not infrequently the heredity is poor. The

¹ *Vide* p. 123 *ff.*

symptomatology in many of these psychopathic states seems to center about an intense feeling of unrest which can be satisfied by, or rather the tension of which can best be relieved by, some markedly disapproved action, or some anti-social action. Accompanying this feeling of unrest are such traits as emotional instability with temper outbursts so severe as to result at times in murder;¹ impulsive behavior, with the slightest impulse determining far reaching decisions; repeated unwise actions, overbalancing any calm or restraining impulses; a lack of consideration of others and an excessive concern over one's own desires; complete disregard for the conventional morals; and inability to persist in a socially acceptable position, primarily because of basic instability. The treatment of this group has been taken over by legal authorities with the consequence that there is no treatment, but only punishment. These persons are ill, just as is the psychotic patient; and *the habitual criminal is a socially sick person who may have a recoverable or an incurable illness, the true nature of which can be determined only by proper investigation.* These psychopathic persons are today treated by society just as unintelligently as were the definitely mentally ill in the middle ages.

Adequate therapy presupposes first, adequate investigation of causes.² If there is a primary defect in the constitution of the person, then the case is seemingly hopeless,³ but is not actually so. These patients often can be made to adjust in a controlled environment, where little demand is made upon them, and where although required to perform useful work they do not have any real responsibility. Moreover, if the personality of those in charge is understanding and firm, any emotional outbreaks can be quickly handled without the use of force or punishment. Bond and Appel have reported such an ideal environment for post-encephalitic children who present behavior problems and they have accomplished much in training children who could not get along in ordinary social contact. Occasionally, children or young men will do well in farm work, or in such a disciplined state as the army. Society, however, has as yet not advanced to the point where it realizes its responsibility for furnishing large semi-hospital units where persons with psychopathic traits can live a useful and constructive life, in a controlled and directed milieu. Criminals often are intelligent persons who have a great deal of energy and who could soon come to understand and adjust themselves to such a type of home without feeling confined, or even without having to be strictly confined. In other

¹ Vide p. 360.

² Vide p. 124.

³ Vide p. 185.

words, these persons are children in the sense that they cannot avoid conflict with society; and society needs not only to care for them but also to give them opportunity to develop to their highest social and personal level.

It is difficult, however, to decide in any given case, whether the psychopathic trait is the result of a constitutional defect. There are many factors in the socio-economic sphere which act as determining factors.¹ Poverty and its accompaniments breed alcoholism, viciousness, prostitution, and other abnormal reaction patterns; yet these same psychopathic states may be based on a constitutional predisposition. Where financial stringency is great, it is most difficult to do any psychotherapeutic work.² Surprisingly enough, there are many psychopathic persons who can come to adjust to very low financial levels and develop mental hygiene concepts which will remove their emotional instability and the consequent psychopathic reactions. In many others of this group, the psychopathic traits are in reality but a form of neurotic reactions, and their therapy is of the same nature as in the neuroses. As has been discussed under the headings of alcoholism and drug addiction, the motivating factors in these patients are often detected by an adequate study of background and personality; and by adequate psychotherapy, many of these patients can be persuaded and trained to adjust so as to live without disturbance in society.³

When the psychopathic states approach the symptomatology of the psychoses, the patient may need to be treated as a psychotic person. If, for example, the patient is brutal, paranoid, with outbursts of dangerous rages, hospitalization is preferable to permitting such persons to be loose in society. There are many instances where such persons cause untold suffering at home, and yet when finally brought to the psychopathic hospital cannot be kept, because they do not present a definite psychosis. These patients when treated with metrazol,⁴ will often change considerably in their behavior, particularly when this therapy is followed by adequate retraining. Such a course of therapy is often difficult to carry out, for some of these patients are so able to control their actions when examined and when they know that they are under observation that the lay person passes them off as being adequate but "misunderstood."

Miss V. W., aged twenty-three years, had been sent twice to the psychopathic hospital and twice released as not psychotic. She lived with her mother, father, and elder sister. She flew into terrific rages, throwing dishes,

¹ *Vide* p. 46.

² *Vide* p. 159.

³ *Vide* p. 262.

⁴ *Vide* p. 450.

coffee pots, and even knives at the family when in rage. She became enraged with seemingly no provocation, and screamed at the top of her voice so that the neighbors often called the police. Her father as well as her mother and sister were physically afraid of her. She scolded, was cross, and made life almost unbearable for her family. She had no friends and prevented any of the family's friends from coming into the house. She did not work, and in a few attempts at work, had left the position after a day or two. When strangers came to the home, however, she was polite, quiet, and self-restrained, until they became less strange, and she then released her pent-up emotions. This exercise of self-control enabled her to persuade the psychopathic hospital physicians that she was not abnormal. The patient had always been a tempestuous child, who did not get along well with girls or boys of her own age, or with her family. However, at the age of eighteen, she became enamoured of a young man who did not reciprocate her affections, and who was engaged to another girl. The patient then pretended that she was wealthy and told the young man that she had a fortune coming to her; whereupon he began to pay a great deal of attention to her. (The mother stated that this young man continued to go with his first girl, and that later he was arrested for larceny.) In order to keep up appearances, the patient insisted that the family buy a fur coat for her, and give her a great deal of spending money; and since the father was a day laborer, and his income amounted to \$27.50 per week, it was difficult to grant her demands. The patient developed violent outbursts of anger, and finally the family in desperation withdrew their savings to get the coat. Soon thereafter, however, the young man learned the true state of affairs, and immediately discontinued seeing the patient. It was then that the patient's violent behavior became so intense; and she sold the fur coat for a fraction of its cost a few weeks after she had received it. She would look at herself in the mirror and burst into fearful screams, she would tear her hair, and throw the furniture about.

When the patient was seen first at the office she sat and talked almost normally. She stated that she felt inferior, that life was not worth living, that she was born an imbecile and ugly, that she knew she did "crazy things" but she just couldn't help herself. She wished "to be smart" but knew it was no use studying and that she was doomed.

Attempts were made to treat the patient psychotherapeutically but she returned to the office only at irregular intervals, broke appointments, and continued her unbearable behavior at home. During the last visit she was persuaded to go to the sanitarium for treatment, and following an impulse of the moment did so. Twelve metrazol convulsions were given her, and she changed remarkably. She became very quiet and talked with her mother "just as a daughter should." She left the sanitarium, seemingly cured, but had a relapse to her former behavior after a week. This relapse lasted for several days and then she again became normal, and in the succeeding year remained "normal."

In this patient none of the overt evidences of psychosis in the usual classification sense could be found, but her actions were obviously those which would not permit her to live in society. In part, her reactions were the result of frustration in her love affair,

but underlying all her behavior was the psychopathic personality. The metrazol apparently removed some of the psychotic nature of her illness, and she was then able to readjust to her "affair" in a healthier manner.

DRUG ADDICTION

Because of the difficulty in checking on both the source and the distribution of opium, it is extremely difficult to determine the number of addicts. According to the 1941 report of the U. S. Treasury Department, the number of non-medical addicts was estimated at 1 to 3000 (*i. e.*, over 40,000 in U. S.), and two decades ago there were three times that number. The Opium Advisory Committee of the League of Nations in an analysis of all available facts estimated that the total world production each year is about 8,600 *tons* of raw opium, which would be equivalent to 70 grains for every living person on earth. Cocaine and cannabis (marihuana, hashish) are similarly widely used by addicts. Addiction to these drugs implies a physical as well as a psychic dependence on these drugs, and more or less characteristic signs and symptoms result when there is a sudden withdrawal of the drug.

Addiction to coffee or cigarettes (some authors use the term *habitation* in these instances to imply that there is no physical dependence on the caffeine or nicotine) does not result in harm to society; whereas addiction to the opiates or to alcohol often results in anti-social acts or such personal harm as to make the addict a social liability. It is for this reason that drug addiction is considered a major social problem.

The principal drugs of addiction are: opium and its derivatives, morphine and heroin; alcohol, cannabis, and cocaine. To this group may be added the barbiturates, paraldehyde, chloral, and other depressants, all of which in large dosage over a long period of time may in some persons, produce addiction. Of lesser power to cause addiction (or *habitation*) are such commonly used drugs as nicotine (tobacco), caffeine (coffee, tea, Cola drinks, etc.), aspirin, acetanilid, and bromides. There are, however, a host of compounds and mixtures, many of them proprietary which are used repeatedly and habitually.

"Broadly speaking, it might be said that the potential addict, if he so becomes by choice, probably selects his drug of addiction to suit his personality.¹ A nervous, irritable, worried, or grief-

¹ This statement applies to alcohol as well as opiates and other sedatives.

stricken person may find temporary solace in the apathetic and dreamy state produced by opium, morphine, heroin, or a barbiturate. Persons of this type may be addicted for long periods (provided they have access to the drug) without becoming a social problem. If they are deprived of the drug they usually become a burden on society. From this class come many petty criminals, thieves, shoplifters, etc. Occasionally, when in a suggestive state, these persons may at the instigation of another, commit crimes of passion. Usually, however, individual initiative is reduced to a minimum. There is no such entity as the "heroin" hero of the dime novel.

"The phlegmatic, egocentric individual with a subjective awareness of inferiority may temporarily inflate his personality to become the 'king of all he surveys' by the use of cocaine, hashish, or in many instances, alcohol. The inflation of personality produced by these drugs is responsible for the acts of aggression committed under their influence. Unrestrained crimes of passion are not uncommon. The potential bank robber finds in the white crystals of 'snow' (cocaine) the temporary but necessary courage to complete his drama, even though murder becomes an essential to its success.

"The foregoing statements are obviously generalities and it would be an error to leave the impression that all addicts are vicious or that they come from the lower strata of society. This would be far from the truth. The factors responsible for addiction are many; as examples may be cited, easy access to drugs (physicians, nurses, druggists); injudicious use by physicians (therapy) and vicious associates."¹

It is quite possible under certain circumstances for most persons to become habituated to drugs which are used over a long period of time. However, the fact that a person becomes addicted to a drug after taking it several times, implies a serious defect within the personality. In most persons who are given morphine for long periods of time, for example in severe cardiac ailments where rest is essential, addiction to the drug infrequently occurs; and yet in a small number of these persons, drug addiction is liable, if they are emotionally irritable, and in the habit of seeking support from others. Similarly those who are treated by physicians and claim thereafter that it was the morphine given during illness which initiated them as drug addicts are generally those types of persons in whom there were personality defects so great that they would

¹ Seevers, M. H.: Drug Addiction Problems, Sigma Xi Quarterly, 27, 91, June, 1939.

have sooner or later developed some form of addiction (if not of opium, then alcohol, or barbiturates). In many manic-depressive depressions, for example, powdered opium is a favorite prescription to relieve the tension, and when the depression clears up, so that the normal personality of the patient reasserts itself, there is no need for the opiate though it has been given daily for several months. Laudanum and paregoric have been widely used for diarrheal states, and have rarely resulted in addiction. It is important to recognize that addiction occurs primarily in very susceptible persons; and should the physician feel that his patient is neurotic and unstable, it is well to use as little of the opiates as possible. There is no definite criterion by which one can say that a patient will or will not develop addiction; but the family physician, knowing a patient or a family over long periods of time is often far better qualified to advise on the use of drugs than is the specialist who may see only the controlled personality. If it is desirable to give morphine it is well in all instances, and particularly for those who are very unstable, to misinform the patient as to his medication.

Psychoses as such are not common in opium addicts. Users of the drug rarely "go insane" though they may in their effort to obtain the drug be driven to many asocial actions. The morphine addict finds most of his pleasure in the initial use of the drug. During this time his physical dysfunctions are less disturbing to him, and activity is easier to carry out. He lapses into a dream-like state wherein the most pleasant air castles are formed, and wherein there is little worry or fear. There is a tendency to a mild euphoria which while subjectively felt is not noticeable objectively to a stranger. After this initial stage, the continued use of the drug results in sluggishness of associations, and impairment of attention resulting from pre-occupation with the vague dream-like state, although the addicts are completely oriented and lucid if one can gain their attention. They care little for the "cold outside world" and disregard social customs, conventions, and obligations. "Right" and "wrong" have little meaning as long as they can continue to be unaware of external irritations; and should thieving, cheating, or even violence seem the easiest manner to obtain that which they wish, "conscience" will neither inhibit nor rebuke. That which requires an effort of will is too disturbing and irritating, and daydreaming is much easier; so that many activities which are required under ordinary conditions are dispensed with. The addict simply becomes indifferent.

Physical changes may be at a minimum; and the characteristic feeble, debilitated, and emaciated person, with a sallow, greyish complexion is found primarily in those who have become social outcasts and are penniless so that they do not get the proper nourishment. Tuberculosis often carries these debilitated addicts away.

When the drug is withdrawn, the addict becomes very anxious, and may show signs of a panic. He can think of nothing but the drug and suffers torture until he can obtain "a hypo." Physical symptoms occur and the more confirmed the addict, the greater the withdrawal symptoms. In severe cases, in animals as well as men, death may result. The withdrawal symptoms present themselves in the form of extreme pallor of the face, acceleration and weakening of the pulse, general prostration, cold sweats, and spells of yawning. If abstinence continues, the condition may become alarming; and the circulatory collapse is apparently at the basis of the fatalities which occur. Yet no matter how grave the symptoms appear to be, an injection of morphine nearly always gives relief.

The physiologic changes during withdrawal consist of concentration of blood resulting from loss of fluid, increased fluid in the brain (similar to the alcoholic wet brain), decreased oxygen in the venous blood, and diminished ability to withstand oxygen deficiency.

This condition can be reproduced in the monkey. The known facts are these: The cells, or reflex centers of the central nervous system when repeatedly exposed to a drug of addiction become increasingly irritable. This fact is true whether the drug of addiction is primarily a depressant (morphine) or essentially a stimulant (cocaine). This new and elevated level of irritability results in an increased tolerance to depressant drugs and a decreased tolerance to stimulating drugs. In the case of the depressants, the new level of irritability manifests itself only when an insufficient dose is administered or when the drug is withdrawn; whereas with stimulants, it is apparent, to an appreciable extent, only during the excitation of the drug.

Tolerance develops to the continued use of these drugs of addiction, so that subsequent doses need be much greater than initial doses in order to produce the same effect. This tolerance is, however, present for only a relatively short period of time so that within seventy-two hours, a dose of morphine equal in size to the last one administered, may be fatal.

The treatment of addiction to these drugs is eminently unsatisfactory. The acute symptoms of abstinence may be treated by the use of small doses of morphine, the substitution of other sedative

drugs, dehydration therapy to relieve brain edema, the use of oxygen tents in emergency, warm relaxing baths, large doses of insulin, and a high caloric, high vitamin diet. Because of their tendency to weaken and procure the opiate anyway, the patients are best treated while in an institution. Most of these patients are very convincing prevaricators, and their word cannot be believed as to their manner of or faithfulness in following the prescribed training. Many of these patients ingeniously manage to procure narcotics even while in a hospital (confederates for example inject doses of morphine into oranges or candy; conceal small amounts in magazines; and even saturate handkerchiefs or sleeve cuffs with the solution [the patient chewing upon a corner thereof or cutting off a piece]; boil it in a spoonful of water over a match and inject the solution with a medicine dropper, etc.). In a controlled situation the opiate is given in rapidly diminished doses, the amount depending not so much upon the patient's complaint as upon the physical signs of abstinence (some patients come to the hospital asking for the "withdrawal therapy" and give their usual dosage as several times what it actually is, in an effort to obtain, in the "reduced" dosage, the amount which they desire). Every effort should be made to interest the patient in activities, and wherever possible, efforts to remove emotional factors should be made. Since there is actual danger of collapse and death, care should be taken to watch the patient closely during the withdrawal of the drug.

After the withdrawal period, and when there are no more physical symptoms, an effort should be made to study the personality and remove what emotional maladjustments may be there. In confirmed addicts this task is almost hopeless, for in a moment of weakness they may begin the habit again. Moreover, many opium peddlers make strong efforts to reconvert the patient, offering a free dose, which a distraught person in a moment of weakness will take; and so the vicious cycle begins over again. However, those who have not used the drug long and whose conscience and moral sense are not too blunted may be reclaimed. Intense psychotherapy should be directed primarily toward decreasing their drives and restlessness, and toward developing satisfactions with what they are doing so that there is less feeling of inadequacy and futility. If environmental changes can be made in a similar direction, particularly if these persons can obtain moral support from the physician, mother, husband or wife, there will be less of an inclination to return to addiction; since the drug is taken primarily because the satisfactions in life are not great enough to compensate

for the difficulties, and there is not sufficient moral stamina to stand up under the strain.

Prophylactic therapy is primarily an international control of the production of the drugs, so that they can be used only under the strictest of medical control. The development of adequate sedatives and pain-suppressing medication will also do away with much addiction. However, all these suggestions represent a superficial attack, a procedure which society is forced to use until it can learn to breed stronger members of society. There are many persons who are so unstable as to become confirmed narcotic addicts should the opportunity present itself, but who are alcoholics, severe neurotics, and marked eccentrics instead. In other words, *the majority of persons who are addicted to narcotic drugs would be markedly disturbed members of society in some other field if they never had an opportunity to obtain opium.* To put it still another way, one may say that as long as there is marked emotional instability among members of society, so long will there be drug addicts of one sort or another.

ALCOHOLISM¹

A definition of alcoholism is extremely difficult to give. Some would define alcoholism as a condition existing in the person who must have his whiskey and soda before retiring; while others would regard the man who drinks half a pint daily as being "normal" unless "he sees snakes." Occasional drinking does not in itself constitute alcoholism. *Alcoholism is a form of drug addiction, and has a similar basis; i. e., both drugs and alcohol are taken because of internal emotional unrest, or because of habit.* If one drinks liquor in any form, at social gatherings, or on particular occasions for festivity, he cannot be classified as an alcoholic; if on the other hand, he is so insecure internally that he uses alcohol as a means of moral support, or because the habit is so strong that he cannot break it, then he may be termed an alcoholic. In other words, *the addiction to alcoholism is determined by the internal drive and not by the simple taking of alcohol. In this concept lies the basis of the treatment: that it is essential to remove the basic instability which requires sedation, and not simply to remove the alcohol, or attempt to make alcohol in itself distasteful.*

Intoxication is an acute alcoholic state. However, one may become very intoxicated after drinking a small amount at one time, and be unaffected by a much larger amount at another time. This

¹ Vide p. 370.

variability is dependent upon the psychologic state as well as the physical state. Again, damage to the brain, such as follows trauma to the skull, tends so to lower the tolerance to alcohol, that those who were able to consume large amounts of whiskey before the accident usually cannot tolerate more than a very small amount after it. Tolerance to alcohol can be built up by repeated use of the drug. On the one hand, if one is psychologically prepared, for example, if he (or she) wishes to enter enthusiastically into the spirit of the occasion in which he is but "cannot let himself go" then intoxication may be quick and require little alcohol; on the other hand, should the group be irritating or the person be concerned over some problem which he is desirous of solving, then many more drinks are required to produce intoxication. Similarly, when one is in a depressive mood swing,¹ alcohol will have relatively little effect.

The type of response to intoxication from alcohol varies greatly with the person, and within each person. Some tend to become drowsy; others become sad, mournful, and pour out their tales of woe; still others become happy, and subjectively euphoric; and yet again, some become pugnacious, or suspicious, or irritable. This difference in response is dependent upon the basic constitution; for alcohol, like any other cerebral toxin first irritates, then depresses cellular activity, thereby permitting one's latent tendencies to be exaggeratedly manifest. It is my impression that knowing the personality response to alcohol, the physician should be able to predict the personality response of that person, should he suffer from general paresis, or any other form of "organic psychosis."²

Similarly, the personality response to alcohol varies within each person from time to time. Conscious control, such as may be necessary in moments of emergency, can "clear the mind," if the person can be aroused to a sense of danger, and if he is not too intoxicated. The ability of inhibitions to prevent going beyond a certain degree of drunkenness is evident when one observes young women who, conscious of the need of not losing self-control, can drink tremendous amounts of liquor and yet give few outward signs of being intoxicated.

The chronic alcoholic person is subject to these various modifications; but as in the case of opium addiction, there tends to be present a more constant pattern of reaction. In the first place, the persistent use of alcoholic beverages indicates the existence of a need for drugging one's self (barring those who develop the habit as a result of social pressure); and this need is often found among

¹ *Vide* p. 287.

² *Vide* p. 355.

persons who, although they possess the manners dictated by society for conformity, lack the moral stamina necessary to face the multitude of responsibilities necessary for civilized existence.

Mr. K. M.¹ came from a family in which there were many alcoholic persons. His uncles drank heavily, two of them dying as a direct result of alcoholism. His father died at the age of thirty-seven from alcohol. His brother drank constantly, and one cousin had to go to the state hospital as a deteriorated alcoholic at the age of twenty-nine. These persons were pleasant, kind, and idealistic, but subject to frequent moods. Responsibility did not rest well on their shoulders, one uncle for example, refusing a profitable share in his employer's business and preferring to remain at a far lower salary level than to having the responsibilities of the organization. The patient, himself, was a quiet person, afraid of "sins" which he had not committed but might have, and yet living a relatively blameless and model life. He was intensely unhappy, and sought refuge in religion, but failed to find it there because he could not rid himself of his "immoral" ideas. He was subject to many phobias and fears, being certain, for example, that he had syphilis, that he was insane, that he would be branded as a coward, etc. Outwardly he "was a nice, intelligent boy" but this pleasant exterior hid a constant turmoil of emotional unrest.

He detested drink and vowed not to touch liquor until he was twenty-one. He did not do so until then, and afterwards drank only very occasionally and not enough to intoxicate. His feeling of guilt and his phobias continued and finally he decided to marry in the hopes that assuming the responsibility of marriage would aid him. As marriage approached, however, he became very apprehensive, and started to drink in order to forget. Thereafter he would drink in sprees, and these were continued until he came for treatment six years later. "I can tell when a drinking spell will come on, because I become bored. Nothing seems to interest me. Time passes so slowly and an hour seems half a day. I become nervous and get depressed. I start off by drinking 'just a few drinks' but once I start I cannot stop."

In the treatment of Mr. M., it was pointed out to him that his drinking was the result of his own feelings of inadequacy plus a periodic tendency toward depressive spells, and that the cure of his alcoholism did not lie in simply removing him from the drug, but in readjusting his personality so that he would be free from his fears and obsessions, and better able to face and deal with life as it is, and specifically so that he learn how to deal with his depressive attacks when they recurred. He was seen twice a week for one month, and then twice a month for a year. A detailed history was obtained, and every incident of unhealthy reaction was discussed in detailed fashion so that the unhealthy nature of the response could be seen, and the healthy type of reaction pointed out, particularly as it applied to his present life. His almost fanatical religious zeal was discussed and he learned to understand "sins" in the light of the phrase "to err is human; to forgive, divine." In the discussion, care was taken not to destroy the patient's faith and belief in his religion, but it was demonstrated to him that he had overemphasized concepts of sin and had not adequately evaluated the constructive tenets of his faith. Psychologically, his phobias and obsessions were traced to their understandable sources (fear of sex, of sin, of cowardice,

¹ *Vide* p. 263 (Case K. M.).

etc.) and he was trained to deal with each of these problems directly. When his depressive spells¹ came on, he learned to do less in the morning, to increase his social activities in the evening, and to force himself into amusements and recreations, not so much to make him happy, since his condition tended to preclude enjoying himself, but in order to divert his attention as much as possible from himself. He had first been seen in February, and seemed to do well; but had a drinking spell for three days in March. Psychotherapy was intensified during this period. He was then well again until September, when he relapsed for two days, but again he came back to "normal" quickly; since then, in the subsequent two years, he has been perfectly normal, not only insofar as his drinking is concerned, but also as regards his attitudes toward life and toward himself. During this period he was working, except for the period of drink when he was in a hospital for two days, each time, although no treatment was given other than palliative therapy. During this entire time, very little discussion was directed toward alcoholism, practically all therapy pointing toward ways of dealing with the basic instability.

Commonly this need for alcohol is felt by persons who develop mild manic-depressive depressions, particularly in the ages from thirty-five to forty-five, but who otherwise are fairly well adjusted.

Mr. F. D., aged forty-seven years, drank for a period of four years. He had been a successful salesman, well known, jovial, aggressive, and well liked. Gradually he lost interest in his work, failed to make the calls he should make, tired more easily, and began to sleep much of the time. In contrast to his usual energetic self, he sat about, was depressed, and did not mix much in the company of others, and began to drink constantly. He borrowed money on all sorts of plausible excuses and spent it in taverns. He gave no money at home, neglected the finances of the house and could not be persuaded by friends, or shamed by relatives into going back to work. His drinking averaged about a pint of whiskey a day.

The history of this patient pointed definitely to a depression, of the manic-depressive variety. He was an energetic, extrovert personality of pyknic habitus, who had gradually changed into a silent and asocial type of person. The only fact which differed from the typical depression was his ability to sleep, and this was probably occasioned by his drinking, his drinking being a method of escape from the depressive feelings.

The depression, however, should ordinarily have disappeared within two years, so that the existing drinking state was one of habit. During the psychotherapy this problem was discussed with him, and the facts presented as simply as possible. The patient was willing to cooperate. Three doses of metrazol were given to clear up any remaining depressive tendencies, and the patient persuaded to start back to his work. He developed a mild manic-phase after the metrazol and thus was able to work more easily and to feel better than formerly so that when psychotherapy was used he felt little need for alcohol. Within a few months the patient had reestablished himself, had ceased drinking entirely, and was an active provider at home.

It was fortunate for the therapist in this instance that the patient came for treatment about the time when his depressive

¹ *Vide* p. 416.

tendencies were disappearing of themselves and the habit of alcoholism was not too firmly established. With the disappearance of his depression (metrazol is of utmost value as an aid for this purpose) the need for alcohol disappeared. In the psychotherapy, moreover, there was no blame or criticism of him for his acts, for criticism tended to make the patient resentful and he would drink "out of spite." Instead, an attempt was made to have the patient understand the "whys" of his condition, and thereby his cooperation was enlisted in overcoming the basic difficulties.

In such cases, therapy will succeed, if one can remove the basic factors, if the alcoholism has not reached the point where the habit is so strong as to be difficult to break, and if there have been no actual brain changes so that the cooperation of the patient cannot be obtained. Moreover, it must be mentioned that metrazol in itself is insufficient, for in practice it fails if it is used alone and not in conjunction with removal of the psychologic attitudes which accompany the chronic alcoholic.

Once the use of alcohol has been established for some years, the habit factor provides for the continuation of the use of the drug, even though the original etiology may have been cleared up. As a result, the therapy of alcoholism is directed toward removing these basic factors; and it is not sufficient merely to deprive the person of his alcohol, for drink will, in most instances, be resumed unless the only factor is habit. In the instance where there is prolonged instability, the cure will come only by psychotherapeutic efforts, such as have been described in other chapters; where there is periodic drinking, and the basis of both the periodicity and the drinking is a depressive swing, this should be dealt with. This depressive swing may be cleared up by metrazol therapy, or by other methods as described in Chapter XVII under manic-depressive psychosis. The habit formation is exceedingly difficult to break at times; and where the physician finds that the patient will continue to drink if he lives at home, the patient should be institutionalized until psychotherapy can take effect, and abstinence diminishes the habit. As a rule, "moral preaching" is valueless for these patients; for those who wish to be cured have already advanced to themselves all the arguments against drink that others can give, and the moral precepts as to the evils involved, serve only to make the patient feel inadequate. If the patient does not wish to be cured, then there is little that will be of permanent value.¹

¹ *Vide* p. 276.

If the patient can be hospitalized for several weeks after all traces of alcoholism have disappeared, one can institute various adjunctive methods which will aid the patient while psychotherapy is being used. If possible the patient should be kept in a sanitarium where the surroundings are pleasant and where a definite routine will occupy his time. Social relations, particularly with alcoholic patients who are well along in the process of recovery, is of great value. During his stay, a well-balanced diet, high in calories, will do much to reestablish a normal nutrition. The food should be appetizingly served.

The actual *conditioning treatment* consists of giving the patient some nausea-producing drug, such as tartar emetic, emetine, apomorphine, gold chloride, and then insisting that the patient drink some alcoholic beverage. This combination of alcohol and emetic is given daily for a week to ten days, and the procedure then tested by giving the patient alcohol alone. If there is sufficient conditioning the very sight of alcohol will produce nausea in the patient. Such conditioning should be repeated if there is any evidence of relapse, not only if the patient takes a drink but, more important, when the patient begins to feel uncertain, insecure, and feels as if he "would like to take a drink." The repetition of the conditioning experiment will often be of great value.

The following statement¹ of the conditioned reflex procedure is an excellent one:

"When first seated in the chair, the patient is given the following sketchy explanation of the treatment:

"Liquor in its intrinsic nature is obnoxious to the body and that he is going to taste, smell and drink the liquor in such a manner that its obnoxious character will become apparent to him. The liquor which he is about to drink is good liquor and contains nothing foreign that will make him sick, and that if he so desires, fresh bottles will be opened for him. He is told that the hypodermic injection which he receives is for the purpose of sensitizing his nervous system so that the true obnoxious characteristic of the liquor will be more apparent to him.

"As soon as this brief discussion is ended, the patient is given two ten ounce glasses of warm saline solution containing $1\frac{1}{2}$ grains of oral emetine and 1 gram of sodium chloride to the 20 ounces of water. We find this is just sufficient salt to mask the taste of the oral emetine which is bitter. Immediately after this, he is given by

¹ Quoted from Lemere, F., Voegtlin, W., Broz, W., O'Hallaren, P., and Tupper, W., *Diseases of Nervous System* 3, 243, Aug., 1942.

hypodermic injection 6 minims of a 40 cc. sterile aqueous solution containing 3.25 grams of emetine hydrochloride to produce emesis, 1.65 grams of pilocarpine hydrochloride for diaphoresis, and 1.5 grams of ephedrine sulphate for support.

"On the table in front of the patient is a large pitcher of lukewarm water, two 10-ounce glasses, two 4-ounce glasses, and the liquor to be used in the treatment. Lukewarm water is used throughout the treatment. Cold water is never used. Into one of the 4-ounce glasses is poured an ounce of whiskey. Whiskey is always given first because it produces the desired gastric irritation. The whiskey is held in front of the patient's nose and the patient is made to smell deeply. He is then requested to sip it and taste it thoroughly and told to swish it around in his mouth and swallow it so that the maximum distastefulness is elicited. Another drink of whiskey is poured and the same procedure repeated. At about this point diaphoresis sets in, but the washable blanket around the patient's shoulders is kept in place. Nausea should begin immediately after this second whiskey drink if the timing has been right—and it must be if the treatment is to have its maximum effect. The patient may object to taking any more drinks, but it is impressed upon him that his whole cooperation is needed and the therapy is continued.

"A 10-ounce glass of warm water with about 2 ounces of whiskey in it is then given. Very frequently this will produce the first emesis. If it doesn't, the patient is asked to drink another straight whiskey and it is very seldom that this fails to produce the first emesis. Before each drink he is made to smell and sip the liquor. Following the first emesis, the same routine is repeated except that two of the mixed whiskey and water drinks are given instead of the saline solution and are followed by pure whiskey. In the first treatment we rarely use anything but whiskey and an occasional drink of straight gin where whiskey fails to bring emesis. After the patient has vomited two or three times, the first session is concluded by giving the patient a 2-ounce glass of near beer to which has been added 5 minims of a solution containing 24 grains of tartar emetic to each ounce for the purpose of prolonging the nausea. The patient is then taken back to bed, wrapped warmly in the washable blankets and a large basin is placed beside the bed. This first treatment usually lasts about twenty minutes, during which time the pulse is taken at five-minute intervals. If the pulse rate goes above 140 per minute, the procedure is discontinued.

If necessary the stomach is emptied with a tube and the patient sent back to his room.

"The second and remaining treatments differ from the first as follows: (1) The dosage of the injectable emetine is increased. (2) The duration of the treatment is increased to about thirty-five minutes. (3) The entire variety and types of liquor are given at each treatment. The treatments are started in exactly the same manner as the first except that the explanation for it is eliminated. Emesis is obtained from whiskey before any beer or wine is given. It is well to remember that it is difficult for many patients to vomit beer because of its foamy nature once it reaches the stomach, so it is best to have at least one or two glasses of the mixed whiskey and water or gin and water in the patient's stomach before the first glass of beer is given. We always add about an ounce of whiskey to the beer unknown to the patient in order to increase its gastric irritative quality. We find that wine is not very nauseating at first, and it is rather difficult to obtain emesis on wine alone, therefore it is best given after the patient has vomited four to five times and following two or three of the mixed drinks. If any signs of absorption appear or if the patient comments that he is beginning to feel dizzy or getting a glow from the liquor, the stomach should be immediately emptied by a tube, because intoxication must not take place under any circumstances¹ during or after the treatment. This rarely occurs if the method is carried out in a proper manner, but until a great deal of experience has been had, it is well to remember this point.

"Frequently the patient will develop a marked aversion to all types of liquor by the end of the first treatment. In these cases, we find it advantageous to give him a day or two of rest. We never, barring physical disability, finish the initial course in less than four treatments, though usually five, six and sometimes seven or eight are required. In the second, third, fourth, fifth and subsequent treatments, the injected dosage of emetine solution is 8, 10, 12 and 15 minims, respectively. The oral tartar emetic in the second treatment is 10 minims and 30 minims in subsequent treatments. The dosage of oral emetine at the beginning remains at $1\frac{1}{2}$ grains.

"An important decision which must be reached after several applications is when one is through with the initial course. This

¹ In 1931, I had an alcoholic patient "cured" by using tartar emetic in whiskey, until one day the intoxication overcame the nausea and the patient "enjoyed" the rest of the whiskey.

decision must be judged from the degree of aversion which has been established and from the patient's general mental attitude. In the majority, the proper degree of aversion is considered established when they become nauseated at the sight and the smell of liquor, and the emesis in the treatment room is prompt and complete from all varieties of liquor. There are some individuals, however, who never can be made to vomit easily, but they do become deeply nauseated and hate the sight, smell and taste of liquor, and their conditioning is just as good as the ones who vomit readily. The proper mental attitude is considered when the patient expresses the belief that he no longer desires liquor in any form and hates the sight, taste and smell of it, and in general wants to have nothing to do with it ever again. It is rather difficult to visualize these last two points, but they are readily recognized after some experience.

"As long as the patient is in good physical condition, he should not be allowed to go back to his room without completing the procedure as described above. Outside matters should not be discussed during the session. His mind should be strictly on the treatment. Conduct the first part of the treatment in a leisurely manner, giving the patient ample time to drink his liquor and, incidentally, enough time for the emetine to exert its action. The liquor should be pushed rapidly toward the end of the treatment. This treatment unfortunately, or perhaps fortunately, often produces a marked urgency to empty the bladder or bowels. For this reason, the treatment chair has a commode arrangement that can be used without interrupting the procedure. This side effect is explained to the patient as the result of the alcohol "coming out" of his system.

"Benzedrine is given before each treatment to facilitate the conditioning process, unless the patient is sensitive to this drug. He should not be under the effect of any sedative as this interferes with the attainment of the conditioned reflex against alcohol."¹

Benzedrine sulphate, 10 mg., given after breakfast and after lunch often is of value in stimulating the patient so that he will not need alcohol to "soothe his nerves." This amphetamine sulphate should be used particularly during the first month or two of therapy and until psychologic and sociologic forces have been mobilized. After the initial use of the drug, it should be discontinued as a routine drug, but should be carried about by the patient and taken

¹ This whole conditioning process follows the basic principles laid down by Pavlov. When combined with fundamental psychotherapy, this technique is excellent.

if there is any desire to drink. Should there be a tendency to sleeplessness because of the stimulating drug, phenobarbital may be used at bedtime.

In this treatment as in all others, the cooperation of the patient is of utmost value. Little can be done if the patient does not wish to get well. Yet the patient is so often uneasy and insecure that unless some form of support and encouragement is provided, together with a redirection of his goals so that he has a feeling of usefulness and accomplishment, he will tend to return to his addiction. There are several methods of providing such *psychotherapy*, in addition to those described before. These include social contacts, the obtaining of a steady and interesting occupation, the removing, where possible, of emotionally disturbing situations in the environment, and the joining of a group like that of *Alcohol Anonymous*.¹ This group is composed entirely of alcoholic patients who have been "cured" of their illness. There are indeed few psychotherapists who have so much influence with the patient as one who has already suffered from the same difficulty. This group is now attached to many of the state institutions, and chapters of it meet in many large cities. Members are assigned to aid the newcomer; and comradeship and encouragement, combined with actual physical aid often are valuable psychotherapeutic adjuncts in keeping the patient well.

The psychoses accompanying alcohol, which include delirium tremens, Korsakow's syndrome (loss of memory, confabulation), acute and chronic hallucinosis, alcoholic paresis, etc., are to be treated as are the other organic psychoses.² In addition, vitamin B is very effective in relieving polyneurotic symptoms.

EPILEPSIES

Epilepsy is discussed in this book primarily from the point of view of the influence of psychogenic factors. Epilepsy is a neurologic disease characterized by convulsions; and since convulsions may result from many different causes, one needs to speak of *different types of epilepsy*. There is the epilepsy of gross brain disease such as syphilis, meningitis, brain tumor, traumatic injury; there is the epilepsy secondary to toxins such as alcohol, uremia, eclampsia; and there are the epilepsies which are without apparent cause, and which are termed idiopathic epilepsy. However, this last mentioned type is one without specific meaning, the term usually

¹ Vide "Group Psychotherapy," p. 439.

² Vide p. 373.

being employed to designate that type of epilepsy about which we know too little to be more specific as to etiology; and one may find many factors which will precipitate these attacks. In this idiopathic epilepsy, according to textbooks, the hereditary predisposition is presumably bad; yet in actual practice, and in the more recent statistical studies, one does not find a higher percentage of epilepsy in children of epileptics than one does in the children of "normal" persons. The percentage of epilepsy in both the children of epileptics and in the general population is about one-third of 1 per cent. On the other hand, some recent electroencephalographic studies have shown that a relatively high per cent of relatives of epileptic patients have brain waves commonly seen in epileptic patients although the relatives themselves have no epilepsy. Although practically all the epilepsies are based upon disturbances of an organic nature, they, like the psychoneuroses, may be precipitated by any of a great variety of factors. It is not unlikely that brain trauma sustained during birth (many normal children have blood in the spinal fluid at birth) and toxic involvement of the brain after children's diseases (measles infrequently leaves a clinical encephalitis, but in many instances there is probably a subclinical encephalitis which is clinically not observed, but which may leave residual damage that may predispose toward epilepsy) may form predisposing factors which facilitates the development of epilepsy. It is probable that most cases of idiopathic epilepsy result from brain damage early in life, but manifest themselves only as the organism approaches maturity.

Idiopathic epilepsy has its peak of onset shortly after puberty, and over three-fourths of all cases begin before the age of twenty. In most of these instances no physiologic or pathologic basis can be determined. The first attacks may occur at intervals of some months or even some years and then become more frequent, until they occur several times a day for many months. The attacks may occur at night or during the day; they may be regular or irregular; they may be preceded by an aura or premonition, or not; they may be of the grand mal or petit mal type; or they may occur in abortive forms or epileptic equivalent forms. The grand mal seizure usually consists of an aura or premonition of an attack either by a peculiar sensation somewhere in the body or, as is most common, a peculiar "feeling" which starts in the pit of the stomach and sweeps upward. This aura frequently occurs a few seconds to a few minutes before the actual attack. The patient then becomes unconscious, may fall to the floor, and give a cry resulting from spasm of the respiratory

muscles. The whole body is in tonic spasm and rigid, and this rigidity with cessation of breathing lasts, as a rule, from ten to fifty seconds. This phase is followed by a clonic state with jerkings of all of the muscles of the body, including the churning motions of the jaw which produce salivary foam, and biting of the lips. This clonic phase lasts somewhat longer than the tonic phase, and the absence of respiration results in the patient's becoming cyanotic and livid. When the movements cease, a deep breath is taken in and the patient may lie quietly in a comatose state varying in length from a few minutes to several hours. After such an attack the patient is sleepy, and may have a headache; but after a few hours' sleep is normal except for the aching of the muscles. If the attacks occur at night during sleep, the patient may be unaware that he had an attack except for the aching muscles in the morning. Urination is not infrequent during such a seizure, but defecation, while it sometimes occurs in the more deteriorated patient, is rare.

In many patients, particularly those under treatment, there may be abortive or "equivalent" attacks in which there is an apparent loss of consciousness but no convulsion. During this stage, the patients may be quiet, standing or sitting without moving; or they may perform all sorts of queer acts; they may run, fight, scream, undress, or do anyone of a number of things, for which they have no memory, and which they cannot explain. These actions are termed the epileptic equivalent and are a form of acute delirium. Shaking the patient, talking to him, or any other procedure does not restore consciousness, until the attack passes of its own accord. After such an epileptic equivalent, the patient is usually amnesic, and cannot recall any of the things he did. An attack of this sort lasts from a few minutes to several hours.

A still less intense form is the *petit mal* attack, in which the patient momentarily loses consciousness, and may drop whatever he has in his hand, or cease speaking, but does not fall.

The attacks may be precipitated by many factors. Great excitement may be a precipitating factor; improper diet (see Therapy) is important; constipation is often present before an attack; and in many patients, changes in weather—particularly those occurring about the spring and the fall—result in the advent of an attack or a series of attacks. Alcohol, in moderation, smoking, and ordinary activity seem to have little if any influence on the course of the illness.

The element of habit¹ is an important one in epilepsy. Every attack facilitates the production of another, and it is important therefore, in therapy, to do what one can to break the cycle even with great doses of medication, in order to decrease the habitual lowering of the threshold to seizures.

The importance of removing the cause where possible is obvious and paramount. Any person who has his first seizure after the age of thirty-five should be strongly suspected of and investigated for general paresis and brain tumor. These two conditions are the most common causes of seizures after this period of life, and curative therapy may often be instituted. Generally speaking one may say that every epileptic patient should be studied thoroughly from the neurologic point of view, in an effort to find some localizing signs which may indicate the site of the lesion in the brain. Electroencephalography where possible is advisable. General physiologic studies, particularly of the glucose tolerance curve, may reveal some general instability which can be corrected. Only after an intensive and extensive examination should the physician, and then reluctantly, classify the patient as an idiopathic epileptic.

The therapy of idiopathic epilepsy is two-fold: one of sedation and the other of adjusting the patient to his disease. The principle of medical therapy consists of depressing the excitability of the brain so that no excessive discharge can take place.

There is no curative therapy now known for idiopathic epilepsy. It is hoped (and not infrequently it does occur) that sufficient sedative can be given to the patient to prevent further seizures; but in studies of patients who had had no attacks for over five years while taking medication it was found that removal of the medication resulted in the prompt return of the attacks. Moreover, the medication commonly used seems to have no deteriorating effects, and so can be safely used for an indefinite number of years. The most commonly used medications are bromides and phenobarbital. The smallest dosage to bring about the cessation of the seizures and to avoid toxic effects should be given. In the initial treatments, bromides grains 10, three times a day should be given; and in the ensuing weeks this dosage should be increased or decreased as necessary. If the bromides do not appreciably alleviate the attacks (grains 15 three times a day is generally the maximum most patients can tolerate) phenobarbital can be added, beginning with $\frac{1}{2}$ grain three times a day and increasing to

¹ Cf. p. 283.

grains $1\frac{1}{2}$ t.i.d. Patients under this combined dosage may continue to have seizures and be so sleepy that it is necessary to reduce the medication. A newer drug, sodium diphenylhydantoinate (dilantin) has proved to be efficacious in a large number of patients inasmuch as it reduces the number of attacks and does not have the hypnotic effects of the other drugs. Dilantin is given in $1\frac{1}{2}$ grain capsules, and the initial dose of 1 capsule twice a day is increased up to 2 capsules three times a day. Toxic symptoms may occur with the use of almost any drug and these should be watched for, and the drug discontinued or reduced as is necessary. Where bromides bring about acne, it is often unnecessary to stop the drug, for the skin conditions can be cleared up by the use of Fowler's solution.

In addition to the above medication, many patients are helped by a ketogenic diet. Restriction of fluid intake has been advocated but is of questionable value. Magnesium sulphate in teaspoonful doses every morning serves to keep the intestinal tract open without creating diarrhea. Atropine 1/100 grain with phenobarbital is often of value; but a number of patients who had attacks immediately on taking atropine, benefited by the opposite acting drug, pilocarpine. Countless remedies have been tried with varying degree of success and many new remedies which are tried for the first time seem to be more effective at first than later. It must always be remembered that these patients are very susceptible to suggestion.

The psychologic attitude adopted by these patients is of utmost importance in their adjustment. The proverbial epileptic personality which is supposed to consist of irritability, meanness, temper outbursts, sadistic behavior, etc., is not necessarily part of the epileptic illness. Rather *these symptoms develop as a defense mechanism* because the patient is so ashamed of his illness, and is so handicapped thereby. These patients come to feel that they are outcasts and "queer," that their company is not desired, and that they cannot do what all their friends do. Often these patients are intelligent and ambitious, and yet are relegated to inferior levels of activity because of the distressing nature of their seizures. It is in reaction to these disturbing facts that the sadistic personality develops.

When patients are properly treated, such an attitude can be obviated. These patients should be encouraged to live as nearly normal an existence as possible. They should not drive automobiles, nor work near dangerous machinery; but they should go

about town, to school, and to work; they should attend social gatherings, and mingle with friends; they should think and plan as if they had no illness; in other words, with relatively few exceptions *they should live a normal life*. Moreover, they should understand their illness in terms of organic pathology and remove from their attitude all traces of stigmata or ideas that they are insane. It is to be pointed out to them that many great men who have accomplished much have been subject to these attacks. Their self-respect must be restored, and they should be given the necessary understanding so that they can function without being constantly irritated or depressed.

In actual practice, a large percentage of these patients can live a modified normal existence, and not develop any of the psychopathic personality patterns described above. Moreover, because of the lessening of tension the actual number of attacks is decreased. The patient is told to take an extra tablet of phenobarbital in moments of excitement, but *not to avoid excitement*. Often the attacks are more common just before or after the menstrual period; so the dosage of medication is increased at those times. Similarly when the physician carefully studies the record of the individual patient he may find a predisposition to attacks at certain times, and an increase in medication at such times is more helpful than an indiscriminate giving of medication throughout the day. Some patients, for example, have attacks only at night and are benefited by taking double doses before going to sleep; others have attacks just before getting up and medication on awakening often wards off such an attack.

For several patients who have been suffering from epilepsy which was associated with much tension and emotionalism, hypnosis¹ in addition to psychotherapy has yielded excellent results. In hypnosis an effort is made to teach the patient how to relax. Many patients are so apprehensive, that the fear acts to lower their threshold to precipitating stimuli, and psychotherapy plus the use of hypnosis often ameliorates the condition. Many such patients are able to work, and a much smaller percentage than usual require institutionalization when such therapeutic efforts are used.

Mr. K. L., aged twenty-four years, complained of having had "spells" since the age of fifteen. He was riding in a street car when he "fainted" and on recovering was told he had had a convulsive spell. Since that time he had several attacks each month. The number of attacks varied considerably however; some months there would be one or two attacks

¹ *Vide* p. 230 ff.

weekly, and some months there would be no attacks. There was no correlation observed between the number of attacks and food, weather, exercise, use of coffee, tobacco, alcohol, excellent sleep or poor sleep, or any other determinable factors. There seemed to be a few more attacks in the spring and in the fall, but even these showed no consistent relationships. The attacks were primarily in the nature of grand mal seizures, preceded by "a funny feeling in the pit of the stomach" and followed by a marked feeling of tiredness, sleepiness, and headache. No history of petit mal attacks could be elicited. There was no history of early trauma, birth and early development were "normal," and heredity showed no pathologic ancestry. He developed an irritability, had temper outbursts, was asocial, and suspicious. In addition he stammered a great deal. The patient was given phenobarbital grains $\frac{1}{2}$ three times a day; he was put on a ketogenic diet; he was advised to see to it that he had regular elimination; and from the psychotherapeutic point of view, he was advised to give up his seclusiveness, and go out as if he had no "spells." He was told to avoid driving a car, or engaging in any occupation in which he would be injured should he fall; but other than such restrictions, he should lead as "normal" a life as possible. If he were to go to a party, or some other affair in which he might become excited, he should double his medication. Above all, he was to prevent himself from becoming bitter, and angry first at his own incapacity, and secondly by irradiation, at the world. Hypnosis was used to teach the patient how to relax, and further to instill the above attitudes. The medication was insufficient at the outset to control his seizures completely, and the phenobarbital was increased to $1\frac{1}{2}$ grains morning and evening, and $\frac{3}{4}$ grain at noon. On this régime his attacks decreased to the point where they occurred two or three times a year, and the work that he procured as stock man and which required heavy physical labor gave him immense satisfaction as well as the feeling of independence. He was fortunate in that his several attacks always occurred away from work. His so-called epileptic personality disappeared, as did his stammering; and to all intents and purposes, the patient became a well adjusted person.

FEEBLEMINDEDNESS (AMENTIA)¹

Feeble-mindedness is a condition wherein the intellectual capacity of the person has been impaired since birth or since very early childhood. Such a person may be normal emotionally, and will tend to suffer from practically all the ills and experience all the desires of normal persons provided his capacities are not overtaxed. Feeble-mindedness, as a rule, is not a progressive disease; there are no persistent pathologic processes which increase deterioration; the individual person remains intellectually at relatively the same stage after puberty as he was at puberty.

Feeble-mindedness is a relative term, the "norm" of mental age for adults being fixed at about fourteen to sixteen. According

¹ *Vide p. 23.*

to our present concepts, in all persons the actual intellectual ability or capacity increases from birth until shortly after puberty. Our increase in intelligence after that period is dependent upon knowledge and experience and not upon increase in capacity. This intellectual capacity has been arbitrarily determined by giving many tests to children and setting as the mental age, the chronologic age of most of the children who have been able to pass the tests at one level but not at the next level. Thus for example, several thousand children, aged six years, were given tests of various degrees of difficulty, and those tests which 75 per cent could pass were considered as tests measuring the normal mental age of a six year old child. The seven year old child could pass a few more difficult tests, and when the grades in these tests were added to his score, he was said to have 100 per cent normal intelligence for his age. The tests given during the draft to the American Army in 1918 showed that the average male could pass only the tests of a thirteen and a half year old child; although these men were more efficient than children of that age, in that they had learned or memorized by experience how to act in certain situations. In actual life, a person whose mental age is about twelve (an intelligence quotient of 75 to 85, depending on the standard used) or less is considered decidedly stupid. Such a distinction is, however, a relative one. Two social workers were recently overheard speaking of a youngster who "couldn't quite make the grade in school" and "something would have to be done for his retarded state." This child had an intelligence quotient of 120; that is, he was mentally two years in advance of his chronologic age; but he attended an elementary school under university direction where the average child had an intelligence quotient over 130. Not infrequently the intelligence test is unsatisfactory for some reason and does not give a true picture of the child's mental ability. Moreover, our tests, as used today, are of far less value in judging the mental age of adults than of children. Further, it must be again emphasized that, as a rule, *intellectual ability is not related to emotional stability.*

When a person has a mental age of less than two years, he is classified as an idiot; when his mental age does not exceed that of seven years, he is termed an imbecile; when his mental age is between that of a seven and a twelve year old he is termed a moron (this word has been twisted by the newspapers to mean a sexual psychopath). The ratio of idiot to imbecile, to moron, is as 5:20:75; in other words, the distribution of mental ability follows a frequency curve. The number of feeble-minded persons in the

United States has been estimated to be over a million; but this figure is purely a guess, and the mental age where normalcy begins and feeble-mindedness ends has not been sharply defined.

The causes of feeble-mindedness are not always easy to determine. Undoubtedly one of the most important causes is poor inheritance, but this inheritance does not necessarily mean that the parents are themselves feeble-minded; for it has been estimated that should all the feeble-minded persons now existent be prevented from having children, the next generation coming from "normal" parents would have approximately 88 per cent as many feeble-minded as there are now. These feeble-minded would spring from the recessive genes which are present among normally intelligent persons. However, many persons become feeble-minded. Intrauterine disease, and disturbance in intrauterine circulation as well as birth trauma may play important roles in bringing about this condition. Congenital syphilis, cerebral infections and toxins, certain neurologic diseases, head trauma, and endocrine disturbances are a few of the various factors which may play an important role in the bringing about of this intellectual defect.

The symptoms of feeble-mindedness are of three general categories:¹ (1) those of the etiologic factor, for example birth trauma may leave the child both mentally deficient and with a spastic paraplegia (Little's disease); (2) signs of inability to cope intellectually with life's incidents as adequately as can other children of the same age; and (3) emotional outbursts and various neuroses which result from the resentment which grows out of recognition of inadequacy, or which result from being forced (by anxious parents *et al.*) to do more than he is capable of doing.² These last mentioned symptoms may on occasion amount to intense psychopathic reactions, or even to psychotic symptoms.

The primary etiology of these conditions may at times yield to therapy. Syphilis and cretinism may be treated; and in many instances the condition may be ameliorated, if the therapy is begun early enough. However, in Mongolian idiocy (it more properly should be called imbecility since the mental age usually reaches about seven years), in birth injury cases, and in encephalitic illnesses, the damage has been done, and a cure is practically impossible to establish. It is possible, however, to develop these children to a fairly high level of adjustment, with proper training, and in not too demanding an environment. The symptoms of the original illness such as spastic paraplegia, epicanthic folds of the

¹ *Vide* p. 355.

² *Vide* p. 163.

Mongolian idiot, the small head of the microcephalic, etc., remain unaltered as long as the patient lives; and these patients may live as long as do "normal" persons.

Many of these patients, however, are brought to the physician because of their retarded mental development. Many of these children do not sit up until they are ten or twelve months, do not walk until eighteen or twenty months, do not talk until three or four years, and do not play with other children of their own age. These ages vary from the normal according to the degree of feeble-mindedness. They seem dull of comprehension, and not so smart as others, although the mother will often vehemently deny that her child is below par and will give many evidences which she considers proof of normal or even superior intelligence. When the child is sent to school, he does not learn well; and often even the teacher will remark, "Charles is a nice boy, and I'm sure that he could do the work if he would only apply himself." At home the child does not play with children of his chronologic age but rather with children of his intellectual age. Indeed a crude estimation of the intellectual level of the child can often be made by determining the age of the children with whom he likes to associate. (Not all children, however, who play with those younger than themselves, are mentally deficient.) The intelligence quotient of these children tends to remain the same throughout their development. The intelligence quotient, written usually as I. Q., is determined by dividing the mental age of the child by his chronologic age. Thus if a child has a mental age of five and is seven years old, his I. Q. will be $\frac{5}{7}$ or 71 (really .71); when this same child is fourteen years old, his I. Q. will still be 71 (this ratio remaining constant) and his mental age will be ten years. In other words, the child will not "grow out of it" as is so often told the mother, and usually his mental age will fall behind his physical age in proportion to the ratio indicated by the I. Q. The main pitfall in such a prognostication is the accurate determination of the child's mental age, for there are many complicating factors which may make the child "appear stupid" without his actually being so. In addition to such difficulties as lack of proper cooperation from the child and imperfection of the test, there are such special difficulties as reading disability and mirror writing which may make the child appear to be less intelligent than he actually is.

The emotional outbursts of these patients is less the result of their lowered mental capacity, than of the pressure put upon them by anxious parents or a demanding environment. Frequently

a mentally retarded child becomes mischievous, has temper outbursts, does not pay attention in class, will deliberately annoy the parents, etc., primarily because of an intellectual inability to do that which is demanded of him. Mothers and fathers will criticize such a child, urge him to study more, make fun of him in an effort to have him obtain better grades in school; and although the child is intellectually impaired so that he cannot perform the tasks, he is emotionally just as susceptible to criticism as is the normal child. Where this critical attitude of those about him becomes intense, or is constant, the child may develop sadistic or intensely vicious traits. If the pressure becomes too intense, the child or adult will develop acute neuroses or psychoses, characterized by fear or simple delusions. The case of the young man with the painful ear¹ is to the point.

The therapy of such children is directed not toward increasing their intelligence but toward modifying their environment² to their capacity, and training them to adjust happily in that environment. As has been discussed in Chapter VIII emotional difficulties result from environmental demand in excess of personal capacity; and it is of the utmost importance, therefore, to create and maintain emotional stability in these children. A simple environment, association with friends of the same intellectual level, or with intelligent supervisors, a full day of creative work which requires little mental and much physical activity, and finally a well planned social and recreational program, which is not on too high an intellectual plane: such a planned environment can make these children content and happy, and offers them adequate opportunity for the expression of their capacities. Moreover, little is as yet understood of the various natural abilities present in man; and some feeble-minded children may have remarkable facilities in art, carpentry work, and other skills utilizing their hands and emotional capacity rather than their intellectual ability. When it is difficult to place a child in such an institution, the child may well be kept at home; girls may be taught to do excellent housework, and boys may become very useful in assisting around the house. There is, however, not only the danger of parents expecting too much from the child and thus producing emotional instability, but also there is the disturbing problem of sex. The actual sex desire is markedly diminished in these feeble-minded persons even in adult life, and institutions which are properly regulated have very few sex problems in men or women confined to the grounds for many years

¹ *Vide* p. 322 (Case Y. R.).

² *Vide* p. 163.

(these children may live until a very ripe old age). In an ordinary environment, however, the ordinary relationships between men and women, the awareness of marriage and its implications, the occasional company of some male who can take advantage of a feeble-minded girl's lack of understanding, all tend to make sex a problem, a problem which may become serious and result in sadistic behavior. Again, many of these patients will never be able to earn their own livelihood; and when the parents have reached the end of their earning capacity, the problem of support becomes a difficult one. For these reasons, it is as a rule advisable for those markedly retarded to be placed in some public institution early in life, so that they can adjust while young to a routinized existence.

N. D., aged eleven years, was brought to the dispensary by the mother who considered her "nervous." On further elicitation of complaints, the physician discovered that the girl had not attended more than one year of school, had not learned to talk well, and could neither read nor write. Further, it was found that the patient had been delivered by forceps, that she had not walked until she was four years old, that she had never talked clearly, and that she was very awkward. Her mother spoke at length about training the child to overcome her "muscular incoordination." The child had had no serious illnesses. She was very emotional, and cried and laughed easily. She had no playmates and stayed in the home all day long, attempting to help the mother. The child's memory was poor and the mother was impatient with the child's "stubbornness" in not learning the ordinary routine of keeping house. The patient had two sisters, both of whom were normal. She enjoyed going to motion pictures and enjoyed seeing sporting events. There was no economic pressure. Physical examination revealed no abnormality. In conversing with the girl, one had to speak as if to a four or five year old because of her evident lack of comprehension. There were no evidences of delusions or hallucinations, and there were no fixed ideas. She was oriented, but she could not do arithmetic problems of the simplest sort, and could neither read nor write. On the Binet-Simon intelligence test, she obtained a score indicating a mental age of four years and two months. The diagnosis was feeble-mindedness, subgrouping of imbecility. The prognosis for improvement was poor, there being practically no possibility of the child's developing into a normally intelligent person. The mother was informed of the diagnosis and prognosis; and when she asked for advice as to what to do, was told that she could keep the child at home and not expect too much from her. The mother was instructed not to urge the child beyond her capacities and to guard her from indiscriminate contact with young men, inasmuch as feeble-minded girls are very easily influenced. However, if the mother was at all concerned about her future ability to support the child, it was advisable to institutionalize her in a state hospital at an early age so that she could adjust to such environment while young, and avoid some degree of unhappiness because the prolonged attachment to the parents would make later separation more difficult.

Mr. E. G., aged thirty-two years, was brought into the clinic by his wife. He complained of a pain in his neck and although no pathology could be found and his wife "knew" there was nothing wrong with his neck, she used his pain as an excuse to have him examined for his "mind."¹ She stated that she had been married four years and that she was sure that he was "crazy." When he played with their two year old child, he would pull her hair, and make her cry "just like he was a kid teasing another kid."

A short conversation with the patient soon brought out the fact that he was mentally retarded. There were, however, no peculiar ideas, there was no evidence of delusion or of hallucination; he was not depressed or elated, and there were no signs of any psychopathic trends, other than his mental sluggishness. The patient was oriented as to time and place, but his memory was poor; his grasp of general information was very inadequate; his ability to do simple arithmetic problems was poor. A psychometric examination revealed that he had the mental ability of a child of eight and a half.

The social worker brought some very interesting facts to light. The patient had lived with his mother until his marriage four years ago. He had failed three times in fifth grade, and as a consequence had dropped out of school at the age of fourteen. He had never worked, could not write more than his name, and rarely read even the paper except for the comic strips. His mother took care of his every need, working while he stayed at home. Five years earlier in an effort to "settle" the boy, the mother cast about for a wife for him. The patient never went out with girls; and when his mother arranged a "date" nothing seemed to eventuate therefrom. Finally, she inserted an advertisement in one of the cheaper magazines under the general heading of "Lonely" and, writing as if her son wrote, stated that he desired marriage, that he was a six foot male of pleasing appearance who was lonely and in need of a good wife. The "wife" who lived in Tennessee, seized avidly at the opportunity and after an exchange of letters (the patient's letters all being written by the mother) and photographs, accepted the proposal by mail and came to Chicago to meet and marry the patient.

The patient never procured a position and was supported by private relief until the work relief projects were started and thereafter he worked as a day laborer. When questioned, the patient told of the "swell job" he had on W.P.A. and how he was content therewith. However, after working hours, the patient rarely came to his home but went to his mother's home, returning late in the evening to retire. The wife stated that he showed little interest in the child, and when he did play with his daughter, teased her and seemed to obtain a gleeful joy in making her cry. The wife stated that the patient had never showed any interest in sex, and that in their entire marriage, coitus had occurred only a dozen times, and then only on the urging of the wife. The wife was certain that "he must be crazy."

This case is illustrative of the tangled web which struggling, well-meaning, but ignorant mothers can weave. The boy had always been feeble-minded, and he had no right ever to have married, let alone have children. He needed the sympathetic care and attention that a child should have, but he was woefully inadequate both for society and for himself.

CHAPTER XX

NEUROPSYCHIATRIC STATES IN WARTIME

NEUROTIC symptoms during wartime are still symptoms of tension and symbolism: but the emphasis so far as etiology is concerned is shifted from personality factors to social and environmental factors. The very fact of war tends to create communities of interest, group fears, and group adhesion for defense. In consequence of this uniting with others, each person identifies himself with the joys, victories, pains, and defeats of the group; and this feeling-with-others simultaneously adds to the strain on the individual person, and diminishes the intense concentration upon the self.

The stresses in the present world war (1939-) are as great if not greater upon the civilian population as upon the soldier. Wars have become total wars; and the civilian is important not only because he cultivates the farm or operates the factory, but also in terms of his attitudes. Nothing else has been shown more clearly in this war as the fact that confused, disunited, and frightened populations at home are a greater reason for the loss of a war than actual defeats in battle. The battle which is lost can be fought with reformed lines elsewhere, as has been seen in Russia and Yugoslavia; whereas demoralization, emotional in character, at the home front can result in a complete defeat of the nation within a few short weeks.

NEUROSES IN THE CIVILIAN POPULATION

Neuroses are the result of the inherited constitution as modified by environmental and developmental factors and as acted upon by the existing stress. During wartime the stresses on the civilian include not only the usual and intensified ones of daily life, but the added ones of modern war. The soldier has the added stress of imminent danger of death. In considering the neurosis of any given person during a social conflagration one needs to evaluate all these factors in their relative intensities.

The first two parts of the formula have been adequately dealt with elsewhere in the book. Suffice it to say that a person with a history of behavior problems in childhood, marked maladjustment in puberty and adolescence, and poor adult adjustment as evi-

denced by inability to maintain a position for very long, asocial tendencies, hypochondriacal complaints, etc., has a predisposing background. Upon such a personality the exigencies of war—whether of civilian demands or of military combat—will produce a neurotic or psychotic reaction.

The most common stresses on the civil population during war-time are: (1) the fear of personal attack or injury, (2) the threat of economic insufficiency, (3) the dangers of an inadequate food supply and lack of other items necessary for self and family comfort, (4) the threat of separation from the family, and (5) the disturbance of a routine manner of living and a planned program.

These chronic stresses may produce all the forms of neuroses described elsewhere in this volume. The symptoms may be primarily those of tension, of symbolism or of both. In addition, to these symptoms there may be evidences of psychotic reactions, particularly those of a depression. Many persons become emotional as their business is impaired, as their ambitions and plans are miscarried, and as their husbands or sons leave for the services. Such an emotional disturbance, in persons in the "climacteric period" will often precipitate a depression of the manic-depressive type, the depression, as a rule, having been latent and merely precipitated by the departure of the loved one.

Acute stresses arise during actual attacks by such physical means as bombs or gas, or during psychologic attacks, implemented by rumors, riots, confusion in the leadership, etc. The symptoms arising from these attacks are in the nature of acute anxiety or fear. Patients will show such symptoms as trembling, pallor, forced laughing, diarrhea, frequency of urination, marked thirst, sensations of choking, etc. These symptoms may disappear quickly under prompt and efficient handling. If the danger is prolonged, as in continuous bombing, or if the management is inefficient there will be symptoms of chronic anxiety. In general, persons flee from what appears to be the danger zone, even if they are "jumping from the frying pan into the fire." In addition to anxiety symptoms they will develop insomnia, acoustic hypersensitivity, starting at the lightest noise, glycosuria, palpitation, amenorrhea, and in extreme cases even signs of acute hyperthyroidism. If there are conditions which require enforced passivity, for example during a bombing raid having to hear the screaming of special devices attached to bombs, or helplessly watching the actual wounding of someone close by, persons may have "fits" of trembling, "fits" of screaming, fainting spells, and even actual convulsions.

The treatment of the psychoneurotic symptom during wartime follows the same principles hitherto outlined, with the emphasis on the attitudes toward stress. There needs to be an analysis of the social, psychologic and physical factors involved, and then, where possible, the correction of these factors. The physical factors such as fatigue should be corrected, since it is one of the important elements in the production of neuroses. A well-balanced diet is also essential for populations strained by war work. The social factors are often beyond remedy during such times, and the problem becomes one of adjusting oneself to these disturbances. The psychologic therapy involved requires not only the uprooting of the emotional difficulties of the past with their attendant reverberations in the present, but also, a strong formulation as to the role of the person in the total effort of the community. The business man must learn to accept the fact that he cannot function "as usual" in his daily routine; and must not only resign himself to deprivations during the emergency but actively engage to do all that he can in the community effort so that he may, among other reasons, sooner be able to resume his enterprises. The mother whose son is gone must identify herself with the millions of other mothers whose sons are gone, and she must be urged to work not only to forget herself but actually by her work to aid her son and others' sons. Such formulations are of the utmost importance; and the patient must learn to *substitute the problem of the community for his own personal problem*. Tensions still are present, and one cannot assuage the grief of a parent whose son has been killed; but that parent can sublimate the energy created by the grief into work which will benefit others. The tensions remaining may still express themselves in insomnia and periods of crying; but, for the most part, under guidance they will not produce actual neurotic symptoms.

The psychotic reactions precipitated by the emotional stresses must be treated as are psychoses during peacetime. In the depressions, particularly, convulsive shock therapy is of great aid. Following such shock treatment, psychotherapy, as suggested above, should be pursued.

NEUROSES OF POPULATION GROUPS

The neuroses of a group are not simply the sum total of the neuroses among the individual members thereof. There is an interaction between individual members of a group so that there results

a community type of response which has characteristics all of its own. The community, also, may show symptoms of tension and of symbolism as a mass reaction. Some of these symptoms are as follows: (1) *Anxiety* in the community, manifested in many ways, especially by rumors; (2) *fearfulness of approaching events*, with spontaneous and unwise efforts of the community to fend off the danger; (3) *distrust* and suspicion of one's leaders, of one's neighbors, of one's friends; (4) *defeatism*, with a sense of futility and inadequacy, giving rise to appeasement, withdrawal from the society of other groups or nations, yielding of one's rights, etc.; (5) *lack of an objective* for the group which shows itself in uncertainties as to what is expected of the individual citizen, uncertainties of the legislative bodies, confusion and cross-purpose actions. In consequence there is (6) *lack of determination* to carry out the often innumerable orders by various leaders, and an associated inefficiency in production goals; (7) *unrest* expressed by clashes with authorities, minor riots, or in extreme instances, *actual panic*, sweeping before it the most stable members of the community, and (8) *vicarious (symbolic) expressions* through acts of *sadism*, (e. g., condoning brutal treatment of the enemy, persecution of minority groups and lowering of moral standards, particularly in sexual promiscuity and perversion).

Under pressure, populations show an increased suggestibility, a decrease in critical and reasoning faculties and a marked increase in wishful thinking. On the other hand, it is indeed an ill wind which blows no good; for the increase in concern about events which may affect the whole community results in a decrease in the concern over the self. Actually there is, therefore, a decrease in hypochondriacal complaints and even a disregard of minor physical ailments among civilians, though in a small number the reverse situation may obtain.

The treatment of this mass neurosis, or of mass tension symptoms, is usually classified under the heading of morale. The principles of treatment do not differ widely from the principles of treatment of the individual neurotic patient. They are primarily prophylactic in character.

Development of Community Mental Hygiene (or, Negatively, The Prevention of Civilian Neuroses)

The problem of social psychiatry in the development of an efficient and happy society is enormous; and the problems which

arise are so many and varied that the answers cannot be provided by any one person or even one group of persons. True mental hygiene cannot be achieved by waving banners and making fantastic promises. True mental hygiene in a community, like happiness in the individual person, is not a *thing* in itself. True mental hygiene is a *way* of living, thinking, and feeling.¹ It is a way of being efficient yet considerate of human frailty; it is determined yet not ruthless; it is happy yet not sensuous; it is courageous without bravado; it is the capacity to face facts without defeatism and without false optimism; it is the ability to make decisions and to bear the responsibilities thereof without egoistic proclamants and "iron-willed" invincibility; it is the ability to be progressive technologically, sociologically and psychologically yet to balance between the unchecked idealism of the ultra "radical" and the immovable inertia of the "arch conservative."

True mental hygiene cannot be adopted as one would don a cloak. True mental hygiene is an essential ingredient of every fiber of the social organism, and can be attained only through the process of experience and effort. All of the material, concrete, specific actions which we perform are expedited or hindered, are mechanical actions or human processes, depending upon the mental hygiene background.

Therapy of the Physical Aspects

One of the basic ingredients for community mental hygiene is the physical welfare of the group as expressed in the adequate distribution of food, shelter, and the other physical necessities of life. It is recognized that this problem is one which has confronted man throughout the ages, yet when man first came into existence his battle was not with his fellow man but with the elements. Today, man can so deploy his forces throughout the world that he does not have to suffer because of nature's caprices, and so a new plague has visited him. Man has turned against man. Yet this problem of physical welfare must be solved before other real social progress can be achieved.

During a national emergency, as in the World War II, the distribution of food and clothing has come under public control. As with the individual there should be social planning, centralized and intelligently administered facts should be obtained by consultation with representatives of local communities. Techniques should be devised to determine what the average citizen who is non-vocal

¹ *Vide* p. 386.

and usually non-organized, thinks and needs. These are problems for our sociologists and economists, and upon their work depends much of what man can do with social psychiatry. Social psychiatry can still make its formulations, and hope by its suggestions so to change the minds of men that they will more readily accept the ideas of our economists. Much work needs to be done to educate the people on the most healthful ways of living: diet, work, exercise, sleep, etc.

Therapy of Civilian Attitudes

The development of sound mental hygiene attitudes in a community cannot be achieved overnight. The normal laws of thinking and feeling should be implanted in childhood, both in the community and in each person. Toward this end there should be a carefully worked out program of mental hygiene in the school system, and among parent-teacher groups.

In the school system, it is important to differentiate between indoctrination of specific ideas and the formation of habits of thought and feeling. One must avoid insisting that certain specific ideas are the only ones that are correct. What is important is the education of children in the rules and practices of emotional stability and intellectual objectivity. If the children can learn to understand their emotions and to guide them, if they can be given every opportunity to develop their own emotional maturity so as not to need to resort to temper tantrums, petulance, withdrawal tendencies, etc., they will be infinitely better able to adjust themselves in adult life. Similarly, and inseparably, if the children can be taught the art of thinking objectively, of evaluating all facts in the light of pure reason, of thinking in terms of Boolean and Gratries laws of thought, the problems which will confront them in the future will be far more quickly and easily solved.

The technique of teaching emotional stability and intellectual objectivity has many obstacles. In the first place, the teachers have to be taught. Even more important, teachers need to be selected, less in terms of professional attainments and more in terms of ability adequately to impart the desired emotional characteristics to the children. Often the desired emotional qualities of a teacher can be inculcated and enhanced by education, but many teachers are emotionally wholly inadequate to deal with growing minds in young children.

A second and most important element in the education of chil-

dren is parental stability. Much which is taught at school can be vitiated by an unhealthful atmosphere at home. It is difficult to work out methods of changing this situation. Such techniques as teachers meetings, social workers investigations of homes where an emotional child exists, corrective suggestions and psychiatric advice to the maladjusted home, may be used.

Finally, it is important to educate children as to their responsibilities in community life as well as to their privileges. This education should not be merely on the verbal level. Children should be able to participate in enterprises within the schools, and the communities. In one small community, for example, the children of an elementary school had a problem of caring for bicycles during school hours. They set up regulations which first dealt with the parking of these vehicles but very quickly passed to the point where they devised a set of regulations on the use of bicycles in the whole town, regulations which after being legally phrased were enacted as law by the city council.

The systematic procedure in teaching children in the fundamental tenets of mental hygiene will make these tenets operate automatically in adulthood. However, until such a Utopian state is reached one needs to continue with adult mental hygiene.

In adult mental hygiene for the community as a whole, the first step is, as in the individual person, educating the public *to face facts* without pessimistic exaggeration or wishful thinking. Toward that end, the public should always be informed on all details which concern it directly or indirectly. It is unfortunate that there is an attitude on the part of some newspapers in some countries that one should print only that "which is good for the people." Such an attitude is based on an entirely erroneous concept, for in most instances the judges are more at fault than those whom they condemn to ignorance. When the country is unprepared for war, when it has met with a decisive defeat, where there is a glaring injustice in the social situation, the country should be fully informed of the facts. Only by knowing the truth (and in this, the problem of leaders is of vital importance) can the public hope to reach sound judgments on serious topics. When the public knows that it will be given the facts, the first shudders of alarm will be replaced by an attitude of "we'll correct the situation." There is great inherent intelligence in the "despised mob" as any experienced newspaper man can testify. Yet the public is composed of such an assortment of persons, with so many different points of view, and so many different concepts of right and wrong that

faulty judgments can be minimized only by supplying the public with all information.

Telling the truth will do much to elevate the public's faith in its government and increase their willingness to sacrifice. Even admissions of bad judgments or of incompetence will make the public all the more determined to fight, for continuous rosy announcements by the government do not have a sincere ring; and each person knows, from his experience in everyday life, how errors and incompetence are prevalent in all organizations.

The *formulation of an objective* to the public and the enunciation of the details of that objective whenever practical. This formulation is especially necessary in wartime, for the people are far more willing to fight when they understand the object of their fight, and know the main outline which they are to follow in reaching that objective. Again, in a democracy, it is unwise to "soft pedal" or understate the necessities and adversities which must be faced. It is unwise, for the very strength of a democracy lies in its ability to utilize the *spontaneous* enthusiasm and determination of free peoples in overcoming adversity. In the year of 1942, for example, in the United States, there was a tremendous waste of time and energy together with definite interference with the war success because public officials and people's representatives "were afraid of the public's attitude" on rationing, on the use of men of eighteen and nineteen as soldiers, on labor conscription, etc. Once the government makes its decision, as it must in the wartime, the outlines of the objectives should be laid before the public and the detailed procedures resolutely followed.

Socialization of the community is even more important than socialization of the individual. One of the fundamental and almost "inherent" aversions present in the human beast is fear of and dislike of "strangers." Much of the distrust and suspicion in local communities is the result of the fact that persons are "strangers" to their neighbors. Any activity which enables members of the community to get to know each other is an aid in overcoming such distrust and in increasing community action. Toward that end, the "block" meetings which have been instituted in American cities are of great ultimate value. Such groups should eventually have national problems presented to them for analysis and for suggestions, and the sum total of such thought should be a powerful and wholesome influence on legislative bodies. But entirely aside from any "intellectual" influence, these small organizations in the

block or district zone will do much to unite and organize the citizens.

Work for all members of a community is essential to its happiness not only in terms of a livelihood, but in terms of the feeling of usefulness which is so important for one's self-respect. In wartime especially, the employment of each member is of importance not only for the material produced but for the morale engendered. The supplying of employment is again a function which should, in wartime, be organized and directed by the government. Well organized work will do much to remove problems of delinquency and vice.

Leadership.—Practically all the formulations described above are difficult to carry out in our present governmental organization because in a democracy there are too many persons more concerned about their own welfare than the community's, and many "leaders" are so fearful of criticism of any sort from the community, that they hope to escape criticism by avoiding any action which might attract public attention. Members who have been elected to legislative assemblies often are so afraid of what the vocal constituents will say and of what the special pressure groups will do that they will not act in the best interests of the people as a whole.

Leaders must not only be intelligent but also have integrity and courage. Such a demand in leaders is not a Utopian ideal. We have many such men now in our government, and the people if they are properly educated and given the facts will insist on having even more. Moreover, it is refreshing to find the number of students with ideals who enter college classes preparatory for public services. When these young men who do enter the services are so idealistic and courageous, one finds it hard to understand why their idealism cannot be maintained. True their phantasies need to be tempered by "reality"; but too often men use the concept of *status quo* and self-satisfaction as synonyms for "reality."

Finally, there should be a definite and systematized attempt by the government to foster *education in tolerance* and in the *right of the individual* to achieve his own destiny within the scope of social good. Such educational procedures should be systematically followed as a fundamental principle of democracy.

NEUROPSYCHIATRIC STATES IN MILITARY SERVICE

There has been an almost "universal" attitude that a man who commits a crime, or who suffers from vague neurotic or even mildly

psychotic states, should be sent to the army "because the discipline would do him good." The fallacy of such an attitude was demonstrated in the last war when a large percentage of the "casualties" were neuropsychiatric in character, and when the United States government has had to expend huge sums of money for "shell-shocked" soldiers since the end of the first world war. The military services now realize that it is to their best advantage that the men who will eventually do the fighting be as normal as possible; and, to the government this new attitude will mean the eventual saving of countless millions of dollars in the post-war period.

As a consequence, there is a definite effort to "screen out" of the army those who are neurotic or psychotic. The first "screening" is done by the Selective Service physicians.

Neuropsychiatric states among drafted men before admission to the Army are found in a large number of persons who have seemingly adjusted in community life. There are many so-called "normal" young men who have tension symptoms; which run the entire gamut of those listed under neuroses: palpitation, "skipped heart beats" pain after eating, peptic ulcer, spastic colitis, headaches, paresthesias, apprehensiveness, fearfulness, irritability, etc. Most of these symptoms were present in the men even before the advent of the national emergency, but not a few came into being as a direct result of the impact of war necessities upon their own personal routine. When such men present a past history of tension symptoms they should be rejected from military service. Where, however, the past history of adjustment is excellent, and the symptoms of nervousness and apprehension are primarily the result of having to enter military service, these men should be given another opportunity to enter the service after a period of time, preferably six months, has elapsed and their emotional tensions have had a chance to diminish. If on the second examination, there still are evidences of tension, the rejection should be final. If, in that period of time, the man has adjusted to the changing events and no longer presents symptoms, he may make a good soldier.

A large number of mild psychotic states are brought to the fore in a draft. Men are seen who seem to have made an adjustment in their community, but who are obviously ineffective, withdrawn, or peculiar personalities. One sees young men who are engrossed in their phantasies to an extent where they barely pay attention to the examiner's questions, and who on more detailed examination are found to be asocial persons, never seeking the company of girls, having a long history of masturbation yet never having had sex

contact, avoiding even the company of other men and, who, despite a good scholastic background, are incapable of concentrating upon anything more than a menial, laboring occupation. Such men are "pre-schizophrenic," and should not be admitted to service. One sees men in their forties, who are ill-clad and dirty, not only indifferent to, but unaware of their appearance, men who may work a few days a week or a month and content to live in basements or some squalid room in the slums. Many of these men are mild chronic alcoholics; few have the energy to meet with their fellow men, or even to seek out prostitutes for their sex satisfaction. One such man of forty-four stated that he was getting along well, that he made a few dollars "now and then" and occasionally "hit the bottle" (drank whiskey) and that he preferred sleeping in the basement since his asthma bothered him when he slept on the second floor because the "altitude was too high." Such men may be physically fit (this man had passed the physical qualifications) but despite the fact that they are not sufficiently psychotic to warrant hospitalization they are on the borderline and, under routine army stress would be precipitated into a full-fledged psychosis. There is no treatment for such persons other than sending them to a well-planned colony wherein their total activities could be supervised and to some extent increased.

There is another group of persons who seem mentally and physically to be healthy persons but who, on giving a detailed history, bring out the fact of a previous "nervous breakdown" which lasted from several months to a year. When one analyzes the symptoms of these "breakdowns," one finds insomnia, anorexia, loss of weight, constipation, marked fatigue, inability to concentrate, and depressive feelings. These "nervous breakdowns" are usually in the nature of manic-depressive depressions; and although it is quite possible that individual persons may be able to be good soldiers for the duration of the war, it is all too easy for many of them, especially under the grueling strain required by actual combat, to be precipitated again into their depressive state. Such persons also should be deferred.

Then there is that vast group of psychopathic personalities so hard to diagnose on one or two visits. In this group are the homosexuals, who often are not detected until discovered in their practices in the service. Many of these homosexual persons will admit their tendencies and these should not be admitted to service. A large number of men are chronic alcoholics, and most of these should be deferred for the instability which necessi-

tates that they drink so continuously will manifest itself in military service in some other psychopathic manner if alcohol is not obtainable. Many men who make excellent soldiers drink on occasion; but the chronic alcoholic often has proved a failure in life in his social, occupational, marital and other endeavors. In addition to these more common forms of psychopathic personalities there are all the others one can classify; morphine addicts, addicts to sedatives, sadists and masochists, criminals, kleptomaniacs, pyromaniacs, sexual perverts other than homosexuals, etc. These should be deferred from service, for the therapy, if possible, is too long to make these men effective for military use.

Neuropsychiatric states among military forces not in actual combat or combat zones also may be classified in the categories described above. After all, the psychiatric examination which can be given most of the draftees, is so limited because of the tremendous number to be examined, that only the more obvious disturbances can be detected in the enlistment procedure. Consequently there is bound to seep into military service a large number of men suffering from psychoneurotic, psychotic, and psychopathic states. In the cases of psychoses and psychopathic personalities, therapy is not advised in the military service; for the use of the physicians is far more desirable for men with a better chance at recovery. Discharge from service is advisable. Where there are mild psychoneurotic states therapy may render a man useful for the service, but where the neurosis is evidently of long standing, either transfer to duties with a minimum of stress or discharge from the service is advised.

There are, however, a host of tension symptoms which may occur in relatively normal men, and which need to be dealt with prophylactically as well as remedially. It will be recalled that the formula for the production of a neurosis is: the inherited constitution as modified by the early environment as acted upon by the existing stress. Many men who are "essentially normal" but subject to intense stress may temporarily develop symptoms of tension. The most common of these stresses are: (1) changed occupation; (2) separation from the family; (3) economic threat to family; (4) loss of individuality; (5) necessary submission to a new form of discipline; (6) petty restrictions and irritations with no opportunity to retaliate; (7) dull monotony of army life because of lack of healthy recreation when "off duty," or after training is completed, while waiting for action. As a result of these stresses many men will develop such tension symptoms as "gastric neuroses,"

palpitation, enuresis, irritability, anxiety states, etc. Sometimes, the psychologic tension results in marked temper outbursts, marked obscenity, definite aggressive or sadistic relations to his fellow men, and even pent-up vicious attacks upon superior officers over insignificant irritations. When such a situation prevails in some men, there is a strong likelihood that the other men will be affected thereby; for there is nothing more contagious than a neurosis (or its equivalent). Frequently, commanders attempt to deal with such a situation by harsh "discipline" when far better results would be obtained by dealing with the psychologic factors involved.

Where the monotony of non-combatant service is great, men may become passive, and show signs of indifference, lack of spirit, carelessness in action, and depressed spirits. Many writers have commented on the almost "animal-like" pleasure these men manifest when sent to front line trenches and action.

The treatment of such neurosis-producing stresses of military men not in actual front line service should endeavor: (1) to formulate the objectives of the war for the men (instead of the old attitude "theirs is not to reason why, theirs but to do and die"); (2) to maintain an active physical life, every phase of which is directed toward making the individual and the unit more efficient in combat (made work—such as just marching—is senseless to the average man, and does not utilize the extra spirit which can be obtained by enlisting his interest); (3) to provide an effective personal relation officer who has the power and intelligence and willingness to aid men who are distressed over personal problems (there are innumerable remedial situations arising in the best planned yet necessarily huge armies) and (4) to provide well directed recreational outlets suited for different types of personalities.

The formulation of objectives of the war to the soldiers is one of the best methods of elevating the long-term morale of the men. It is a relatively easy task to arouse men to a pitch of excitement for individual engagements by all the usual psychologic "stunts" which appeal to patriotism, to the man's ego, to the adventurous spirit, to the hope of personal reward, and so on. There must be a more solid basis for wars which require, not chivalrous charging into battle, not heroic and colorful hand-to-hand combat and "let the best man win," but instead demand restraint, calculated, planned, and coordinated activity, the subordination of one's own role in the total picture, a dogged determination to carry on with

the fight long after any possible chance of winning seems to have disappeared. The unit of all armies is the man; and to the extent that he is convinced of the righteousness of his cause, and is aware of the personal stake that he and his have in the fight, to that extent will his morale be high even after the first glamour of the war has worn off.

In the formulation of objectives to the soldiers, the most important element is the sincerity and honesty of the statement. The individual American has had too many years of political oratory to be taken in by idle phrases. It is important that he be given a statement which formulates not only "how good we are and how bad the enemy is" but "these are our defects and this is what we are doing to correct them." No intelligent human being in a democracy will continue to have faith that we are automatically "the best" in the world. Such faith, if not based on real understanding, changes to defeatism on meeting a determined enemy.

The psychologic effect of such education within the army is to increase the determination of each individual person. He has before him the example of a total organism, the army, admitting its inadequacies, and stating its objectives; he, too, admits his inadequacies, formulates his personal objectives, and emulates what he conceives as the ideal spirit, in his determination to overcome his own defects. Again, he identifies himself with the whole group, and his own spirit is increased in the total effort towards victory. Moreover, he, the individual pawn, has been flattered by the appeal to his reason, and he adds more spirit to his effort. Finally, he actually visualizes the real values and virtues of his liberty and freedom and, having a practical demonstration in the effort made to reach him as a man of intelligence, is thus more conscious of something more tangible to fight for. If, in addition, there is the promise, as was made in 1942 by the President of the United States, to the soldiers, of returning from the war to a better organized world, the soldier has a rather complete set of incentives that will furnish that extra drive needed for survival.

Such education, it must be stressed, should not be "flag waving" oratory. Such oratory is too general, too vague, and too empty; for the minds of most men go back to prewar promises. Actual specific instances of actual everyday life as it is now, with defects cited and remedied, is the best and most convincing morale building education.

Neuropsychiatric states appearing under combat conditions in otherwise normal men is related primarily to the emotional stresses

occasioned by fear of personal injury or death, and by guilt feelings over the killing of enemy soldiers. Supplemental elements which act as stresses are the increased responsibilities involved in co-ordinated efforts, in the concern over the physical, economic, and emotional welfare of the family, in sexual deprivation, and in conditions of fatigue. In cases where actual physical injury has occurred there may be associated tension or symbolic symptoms arising from the above-mentioned factors, or from fear that the injury is greater than was admitted, though actual figures show that men with physical wounds are singularly lacking in neuroses. Prolonged petty restrictions may also give rise to a state of irritability that renders the soldier an easy prey to tension symptoms.

Much prophylactic work can be done to prevent these breakdowns in military service. These men should be given instructions, by psychiatrically trained physicians, on the role of emotions in army life. There should be a frank discussion of routine inertia, of "homesickness," of fear, of sex drives, and so on. What men know, they can face; it is the uncertainties which create most emotional disturbances. These instructions should be given soon after admission to the service for orientation purposes, and then again when the men are well trained and prepared for active duty. In the latter courses, there should be discussion of the kinds of symptoms which emotions can produce, and the statements should avoid implying that men should be ashamed when such symptoms occur, but stress the importance of learning how to control one's emotions.

Simultaneously, much prophylactic work can be done by consultations with men who, on entering the army, have problems which they have not fully solved. There are innumerable problems which the army cannot foresee and yet which will play havoc with a man's emotions. Men just coming to large army concentrations from an almost hermit-like existence on a distant farm will be disturbed. Men who have families with sick children or with wives or mothers in urgent need of help are bound to be disturbed. Such problems should be faced by the army; and much can be done for the morale of the individual soldier as well as that of the group, if there is an intelligent handling of the situation. It is often difficult to decide between the "fact that there is a war to be won" and the personal necessities of any individual soldier, but a sympathetic handling of such problem and the providing of a furlough will make a much more resolute and thankful and efficient soldier than the formal army discipline of "our concern is with war

problems and not personal problems." In view of the fact that there is so much difficulty formulating exact rules, it is suggested that the company commander on the advice of the psychiatrist, be permitted to make the necessary decisions. There will be many men attempting to take advantage of such leniency, but often these men can be detected, and more often it is better to err on the side of leniency than severity. Such dealing with men in no way implies a lessening of discipline. Discipline is of great importance, but as in all other things in life, discipline should be tempered by common sense in each individual case. The commanding officer will be more able to rely on determined loyalty in battle situations if he is more personally loyal to the individual soldier in training situations.

Among the more or less normal persons who will succumb to stress one may classify two main groups: acute fear states with physiologic evidences of tension, and acute fear states with symbolic evidences of tension. Between the two are many cases with both types of symptoms, and within each group there are many degrees and intensities of symptoms.

Acute fear with its physiologic reverberations is the most common symptom which occurs. The patient is in an acute state of anxiety which may be manifested by obvious panic, screaming, aimless running, jumping at the slightest noise, obscenity, aggressive attacks, etc. The type of external expression of this fear will vary with the temperament of the person, although if the morale of the group is low, the form of fear expression initiated by one member may be imitated by the others. The firmness and dispatch with which the medical officer deals with a case will also determine the contagiousness of any anxiety symptom. There are many men, who in acute states of fear will give no vocal expression of their state. Occasionally these men act completely confused, dazed, and uncomprehending. Occasionally these men will be mute. Some of them will act almost as if they have been "cortically decerebrate" so that they may be relatively quiet until stimulated and then react with a tremendous and violent response out of all proportion to the stimulus. In still others there will be only the physiologic evidences of tension.

These physiologic evidences of tension in the initial acute form will include dilated pupils, a dry mouth, with attendant thirst, a choking sensation in the throat, palpitation with a very rapid pulse, precordial pain, and extrasystoles, rapid breathing or panting, nausea and vomiting, diarrhea, frequency of urination enuresis,

trembling of muscles, hypertension, dizziness, fainting spells, and marked weakness. These symptoms, which are the acute physical evidences of fear, disappear when the fear and anxiety have been removed. These symptoms occur in the acute phase of an emotional disturbance and are often mistakenly termed "the effort syndrome."

When the anxiety is not relieved, and the tension remains acute, the prolonged over-activity of the hypothalamic area results in the more chronic forms of tension. Thus one may find severe and intractable headaches, paroxysmal tachycardia, peptic ulcer, hyperthyroidism, mucous colitis, essential hypertension, etc. All of these physiologic symptoms are accompanied by the psychologic expression of fear and anxiety, such as general irritability, insomnia, violent nightmares, anorexia, etc.

The second group of symptoms tend to be primarily symbolic in character, but usually present many evidences of associated physiologic tension. These symbolic symptoms (often called "conversion" symptoms) may involve the muscular system: with tics of the face or hands; paralysis of one hand, one leg, one side of the body, or of both; or trembling and convulsion states. The sensory system may be involved with symptoms of anesthesia, paresthesia, hyperesthesia in portions of the body which do not conform to the distribution of any nerve or any spinal cord segment. There may be involvement of the special senses with a symbolic loss of sight, tubular vision, or spots before the eyes; with deafness, or roaring noises in the ears; with disturbances in taste, smell, and touch. These physical signs are symbolic expressions of the acute emotional stress. Similarly, the symbolism may be expressed psychologically in the form of coma, amnesia, mutism, or in fugues during which peculiar or unrestrained actions may occur. These symptoms are often associated with the physical signs of tension mentioned above.

Not only may these physiologic and psychologic signs occur together, but a man may have actual organic lesions and have signs of emotional illness. Interestingly enough, there tend to be few "neurotic" symptoms present during the acute stage of a physical illness; but as the convalescent period draws toward a close, these emotional signs may appear.

Other psychiatric symptoms may occur in persons who are fundamentally unstable. There will always be, in any large group, persons who have escaped the psychiatric screening processes before entering the combat situation, who are predisposed to if not

actually manifesting symptoms of severe neuroses or psychoses. Such men will "break" under severe stress and their symptoms will tend to fall into an already "prepared" pattern. Hence, one will find soldiers who develop signs and symptoms of severe obsessional neuroses, of manic-depressive states, of schizophrenic withdrawal, of paranoia, of acute homosexual excitements, of vicious sadistic actions, etc. These symptoms are not so much the result of the combat situation as precipitated by it, and their therapy is different for this reason.

THERAPY OF ACUTE NEUROPSYCHIATRIC STATES

The treatment of the first groups of symptoms mentioned above which occur in more-or-less-normal persons under the acute stress of war conditions should be carried out as quickly as possible after the onset of symptoms.

The first step in treatment is diagnosis. For the most part, no diagnosis of a pure neuropsychiatric state should be made without a thorough physical examination of the patient. It is fairly easy to make a quick survey of the patient and determine the absence of external wounds or fractures; but it is not so simple to diagnose internal injuries. One of the most common of these internal injuries is cerebral damage without external evidence of such damage. The modern high explosive bombs are capable of killing men at distances of many yards simply by force of the concussion, and only autopsy reveals brain pathology. In addition to the many men who are killed there are many more who sustain fairly severe brain damage without fatal consequence, but with sufficient internal trauma to give rise to signs of confusion and psychosis even in the absence of any external sign of injury.

It is, therefore, well to perform at least a superficial neurologic examination, testing the cranial nerves; the ability to perform muscle movements; and the reflexes, normal and pathologic. If there is any question of doubt the benefit should be given the patient, and proper therapy instituted.

The second step in treatment lies in a previously prepared efficient and intelligent organization of the medical service. One of the most important elements of fear is the impelling necessity of fleeing without direction and without purpose. One of the most effective methods of checking such fear is the presence and supervision of an efficient smooth-working organization which "knows what it needs to do and does it rapidly." Confusion about a

medical service will enhance if not actually create fear within wounded or emotionally predisposed men. Such preparation for emergency is "always ready for the worst" in terms of casualties among the men, and prepared for the worst in terms of destruction of any one of its units.

A most important element in this efficient organization is the personality, clinical ability, and energy of the commanding officer of the medical unit. The example of such a man, the sureness of his tone of voice without the trace of egoistic importance, the definiteness of his orders will do much to allay fears and reduce the incidence of neurosis.

The third step in therapy is the diagnostic formulation to the patient as soon as possible after admittance. Most men are far more afraid of the unknown than the known; and if they know what is before them, if they know how much damage to expect, they are far more relieved than when left "fearing the worst." Thus when a man is conscious enough to wonder about his condition, a statement: "You have a bad leg wound, but I think we'll be able to save it," will do much to enable the man to bear up under the pain, and do much to prevent the formation of a neurosis. The truth should always be told, for the men experienced in battle often can evaluate the likely medical results fairly accurately while, on the other hand, false optimism results in a skepticism of the truth of the physician's word as well as an intense emotional reaction when the man realizes that he has "been fooled." Of course, even in the presence of a serious wound one can avoid hopeless pessimism, and while giving a summary of the facts, one can also provide a reassuring word. A statement of facts from a physician whom one trusts is the best antidote to a neurotic reaction.

The next step is the separation of the physically wounded from those suffering from emotional disturbances. The influence of the emotionally disturbed persons is harmful on those who are physically incapacitated; and *vice versa*, many neurotic persons will "pick up" symptoms which they observe in those with organic disease.

In the separation of these persons with evidences of emotional tension, diagnostic labels are to be avoided. The calling of a man "neurotic" or "psychotic" provides a stigma which interferes with treatment; creates a state of psychologic resistance, wherein the man attempts to "prove" that his symptom is real and remains unyielding to any but organic methods; and finally, interferes with

his morale when he returns to his unit because he has been officially "tagged" with a label of opprobrium.

In an effort to avoid such "labeling" while at the same time providing the men with a diagnosis of their condition which will simultaneously assure them of the absence of organic pathology, provide an explanation of their symptoms, and indicate the temporary nature of their illness, I suggest that all such cases suffering from emotional disorders be classified in the front line hospitals as *exhaustion states*. Men could thus receive psychotherapeutic treatment, recover, and return to their duties without any stigmata attached.

The term "shell shock" was widely used in World War I to describe emotional states occurring during combat conditions. This term supposed that the sound of the exploding shell "shocked" the nervous system in such a way to produce a neurosis. Modern psychiatry no longer recognizes the term; shell shock is not only a misnomer but cases described under that heading fall into every one of the different psychiatric categories. It is well to avoid the use of the term in order to avoid creating the impression among the men that there is a physical basis for their symptoms.

The aim of therapy should be to *restore the man to duty as soon as possible*. The longer a man has an emotional illness the harder it is to cure. Toward this end, therapy should be undertaken at the front line hospital and immediately after entrance. Inasmuch as the supply of psychiatrists is limited, much of the psychologic procedure must be practiced by the surgeons and other medical officers.

PRINCIPLES OF THERAPY

The principles of treatment at the front line should be: (1) to segregate these patients immediately the diagnosis is made from patients with organic illness; (2) to obtain immediately a twelve to twenty-four hour period of sleep, by sedatives if needed; (3) to provide individual psychotherapy as soon after awakening as possible; (4) to provide group psychotherapy together with social and work activity within the first few days; and (5) to return the patient to active duty quickly. In more resistant cases, a series of psychotherapeutic talks should be held, and hypnosis used.

If the patient does not yield to these measures, at the front line hospital, the patient should be transferred to a neuropsychiatric center¹ where: (1) patients should be segregated according to the

¹ Which should also be situated as close to the zone of combat as is possible.

duration of their symptoms as well as to their severity; (2) a psychiatric history should be taken and an evaluation made as to the psychopathologic background as well as to the intensity of the emotional trauma; (3) a planned program outlined after staff consultation, for each patient, and then formulated to the patient. This program is to include: (a) general orientation of the patient as to the nature of his illness and the course of treatment to be given; (b) specific discussions with the patient of his own background to show both how he has been more sensitive than others to stresses and how he needs to change his basic orientation as well as his attitude towards stress; (c) desensitization of the patient to the acute emotional experience which precipitated his illness; (d) group psychotherapy, hypnosis, and group hypnosis as needed; (e) provision of a well balanced program of rest, diet, physical exercise, and social activity, and (f) "graduation" of the men rapidly, into higher and higher levels of social adjustment before transferring them to the action lines. The atmosphere of cure must prevail throughout the hospital.

A word may be said about the use of faradic or galvanic currents in the treatment of these patients. There are innumerable articles and even motion pictures showing how electric current "cured" otherwise incurable patients. The principle of such therapy is both to suggest a cure and to be so painful that the patient will give up his symptom to avoid the pain. There is no doubt that, initially, such methods work in many instances; but there is much doubt as to the permanency of the results. Many writers report how men are "cured" only to return to their symptoms in situations of emotion. One can understand why such therapy can only be temporary. After all, the fears, the inability to control one's emotions, the constant pressure of the nightmare of the psychic trauma which brought about illness has not been dealt with by the electric current. Such therapeutic methods, moreover, convince the patient that his symptom was indeed a physical one to be cured by physical means, and the soldier is left with the same emotional background to bring on another symptom, or the same one, at the slightest emotional disturbance.

In cases still resistant to treatment in those persons found to have a bad psychoneurotic background before entering the service, or in cases with frank psychosis, transfer to the base hospital is advised. At the base hospital, a "total push" method utilizing all forms of psychotherapy, chemotherapy, shock therapy, work therapy and social therapy should be used.

Therapy at the Front

In the following discussion of therapy, there is always one, reservation; namely, that the particular facilities, battle situation and personnel will determine how closely the "ideal" treatment can be approximated. In a fierce engagement, the list of wounded may be so great as not to permit more than a casual glance at the "neurotic"; if the hospital is under constant bombardment, and facilities greatly impaired, psychotherapy may need to be brief indeed; if the call for physicians is too heavy, or the number of neurotic patients too great, or any one of a number of things occur, such therapy as described below may be impossible to carry out. But in a fairly stable front line hospital the recommendations set forth should be feasible. If the case seems too difficult, it should be rapidly transferred to a neuropsychiatric center.

One of the first steps in treatment is the providing of sleep. Many men with symptoms of tension, whether physical or psychologic, are in a state of fatigue. The exhaustion is often so great that resistance to emotional tensions is lowered. When the diagnosis is made of the absence of physical wounds or disease, these men should be given such an explanation of their condition as to remove any sense of guilt, shame, or feeling of being a weakling. They should be told that their symptoms are the result of exhaustion. This exhaustion it is to be explained, will be cleared up by a long, refreshing sleep, and their symptoms will be gone.

The sleep is to be obtained by the use of a sedative such as phenobarbital, gr. $1\frac{1}{2}$; nembutal, gr. $1\frac{1}{2}$; sodium bromide, gr. xv. In cases of acute agitation it may be necessary to repeat the dose every hour. In extreme cases, or in patients whose emotional symptoms are associated with pain, morphine sulphate gr. $\frac{1}{4}$ with hyoscine 1/100 should be used. The narcotic may be repeated at intervals of two hours if required, and the lapse of time between the doses furnishes a safeguard against overdosage. A sound sleep for twelve hours or longer will do much to restore emotional equilibrium.

The next day on awakening, the patient should again be thoroughly examined for external and possible internal injury. Such an examination, if the time permits, not only furnishes a further check on the possibility of organic lesions, but, in the patient's mind, is further proof of the thoroughness of the physician and the absence of organic injury. The examination should be done while the patient is fully awake, so that he can appreciate its thoroughness. As each organ is checked, the physician should state "Well,

your heart is OK, your lungs are clear, the abdomen may show a little constipation but otherwise is fine," etc. There is great psychotherapeutic value in such remarks.

If such an examination shows no pathology, or even some minor pathology the actual facts about his physical condition should be told the patient. He is then to be given the formulation that he was suffering from "an *exhaustion state*" and that the symptoms shown were the result of tension. It is important to formulate, even briefly, that tension operates psychologically and physically, and that in the heat of battle, or under the incessant bombardment of enemy planes "any one's nerves can be frayed" and that such tension makes a man irritable and "upsets his system." The specific aches which he, the patient, has are a direct result of such upset. In such discussion, it is essential to "save face" for the soldier, to avoid any indication that he is a weakling, or that he is neurotic, or that he is shamming. Even if the soldier insists that his illness is organic, and is then shamed, he will usually continue with his illness in order to justify himself in the eyes of his fellow-men as well as in his own eyes. The soldier should be told, that he needs to have "mental" peace as well as physical rest, and that he has to make the effort to overcome his "worries" or his fears. "It is natural to fear" he must be told. "Fear is an instinct of self-preservation, present in all animals." If he had been afraid, there is certainly no shame. Man, however, differs from animals in that he overcomes his fears. Man puts his ideals and goals before him as incentives to keep him going despite the natural tendency to "feel scared." The hero is not the man who is not afraid. The hero is the man who is afraid, but who does what he needs to do despite his fear. "It is easy to understand how anyone who comes to a state of exhaustion, can succumb to his emotions, and that's why you are getting this rest." But at the same time, the man is to do all he can to "rest mentally," which is to say, he is to learn to control his "fear."

After such a discussion, which should be done privately if possible, and if not, to be done in as low a tone as possible to avoid the embarrassment of being overheard by the man in the next bed, the patient should be told to "take it easy" the rest of the day, but to get up and walk about "as soon as he feels like it." His clothes are to be easily available, and the instructions to the orderlies are to permit the men to leave when they wish. Incidentally, human nature being what it is, if the orderlies think of these men as "goldbrickers"¹ or neurotics, they will do much to spoil the rapport which the physician has built up.

¹ Malingerers.

In the afternoon of the second day after beginning sleep, all the men, the number optimally to be about 15, should be gathered in a group, in their own clothes if possible, and safe from being overheard, and given "group psychotherapy." The principle of this group method is not only to explain mental mechanisms to the patients, but to utilize the social pressures and "crowd enthusiasms" in overcoming individual defects. The technique consists of explaining to the men the mechanism by which emotional tension is translated into physical symptoms. There should be no exhortation or appeals to patriotism, but a simplified and easily understood exposition. One can cite examples of how one's heart beats are quickened when one has an emotion of fear or of love. (The interjection of humor which does not cast reflections on the men, does much to ease the situation of such a group meeting.) One can demonstrate the activity of the sympathetic system on the heart and show how the same activity may cause vomiting, or diarrhea, etc. Such an exposition should repeat over and over in layman's language "how" emotions produce physical symptoms.

After the men have been given this "intellectual understanding," one then discusses how emotions arise. There should be a full explanation of the concept of fear, its normalcy, its universality, the ineffective way some persons meet it, the hygienic way to meet it, the acute fear of the immediate danger of being killed, the less intense but wearing away chronic fears which are present over long periods of time. Each statement should be accompanied by an example to show what is meant.

Volunteers are then asked to give examples of how they personally react to fear with a physical symptom. The medical man can volunteer that he "gets a knot in his stomach" when afraid, etc. The volunteering, once started, should be encouraged until every man has consciously and openly made the admission of how fear affects him personally. But, under no circumstance, should any one be "shamed" into making such an admission, for once a person is "shamed" the value of future psychotherapy attempts will be nullified.

After such volunteer statements, the men can be dismissed to return the next day for another session and the discussion continued. The techniques for overcoming fear are discussed. Emphasis is placed on the need for resolution, the recalling to one's mind of what one is fighting for, the importance of the spirit of their division, etc. The statements are not to be in terms of an exhortation, but in the practical terms "these are techniques you

can use, to bolster you up when you feel you're getting tense." Emotional appealing to sympathies and calls for patriotism are not meaningful or real to the average man. The sincerity and practicality of such techniques is far more lasting and far more effective than "oratory."

The men should then have an organized "game." Baseball, volley ball, or other physical exercises are to be preferred, but if not feasible, then card games, or similar games, with two or more men participating should be indulged in. The purpose of such games is to make the man "forget himself" as well as to release his tensions. Discipline should always be maintained, but not at a strenuous level.

It is of therapeutic value to have men who have recovered sleep in the same tents with men with similar symptoms but who are first entering. For the same reason, the best kind of orderly for these kinds of cases, is the man who has himself suffered from an emotional disorder but who has been cured.

Under such a régime, a large number of men can be adequately treated in the front line hospitals and quickly returned to active duty, with no distressing label other than "Exhaustion."

In men who do not respond to such therapy, and after the third day still manifest many of their symptoms or who have symbolic (hysterical) symptoms of mutism, paralysis, tics, etc., one needs to proceed with more detailed and persistent methods. These more chronic cases should be separated, where possible, from the fresh incoming cases because of the *contagiousness of neuroses*. If it is possible to treat them at the front, such treatment should be instituted immediately. If not, the patients should be sent quickly to the neuropsychiatric center; for *the quicker the treatment, the better will be the result*. When a patient has a symptom for some time, it tends to become fixed, and difficult to remove. Thus treatment if at all possible should be started quickly.

A standard form of treatment for each case should be agreed upon; for different diagnoses by different physicians with different types of treatment advised make the patient lose confidence in medical statements and prolong the illness indefinitely. It should be a practice of each medical officer to read carefully the diagnoses of other men, and to bear in mind the possible effects that his statements may have when they are in opposition to previous diagnoses.

In these more resistant cases, individualization of therapy becomes more necessary. Each patient should be talked to separately, and as many as possible of the suggestions for treatment suggested in the neuropsychiatric centers should be followed.

Therapy at Neuropsychiatric Centers

Patients who are psychotic, or who have severe psychoneurotic disorders, or who, for one reason or another, do not respond quickly at the front, should be sent as quickly as feasible to the center. At the center, there should be two types of segregation of patients: those suffering from psychotic or severe neuroses should be in one group away from the others, and those patients who have been under therapy for some time and have not yielded to treatment should be separated from those who have newly arrived and who are recovering. There are too many suggestive influences which may be passed on by severely ill mental patients, and there is too much skepticism and defeatism among the chronically ill neurotic patients to hazard the mixing.

The attitude of the hospital should be one of "cure." Toward this end, nurses, orderlies, and physicians should all talk and think in terms of the men getting well. There should be no open discussion permitted of the "incurables." In addition, men who have nearly recovered or who are ready to be released should sleep in the same ward as those who are entering for the first time. The first-hand evidence of what results can be obtained as seen in recovered men is of great therapeutic value to the distressed and emotionally sick soldier. Where possible, men who are getting well from mutism, from tics, from paralysis, should be assigned to assist patients with similar symptoms.

As soon as the patient enters the hospital he should be provided with a general formulation on his future program. In sensitive men the doubts, fears, and uncertainties of the future add to their emotional state. This formulation, broad and tentative, should do two things: (1) it should assure the men that each of their symptoms will be given perfect study, that most of the men are suffering from exhaustion states which manifest many symptoms, and that a thorough and physical mental rest will be given each man; (2) it should provide an attitude of and atmosphere of cure, of unqualified and absolute belief in the cure of each man. A brief outline of the examinations to come should be given, and the routine of the hospital explained. The men are to be told then that a number will spontaneously find that after the physical and nervous exhaustion is over (since such exhaustion is always temporary) they will feel recovered, and they should report to the commanding officer at such time.

Such a general orientation not only eases the fears of the men but

is definitely part of the group psychotherapy. Moreover, the removal of all feelings of guilt or shame materially aids in spontaneous recovery. This general orientation may be given to a new group as a unit, and should preferably be given after the men have had a chance of a good night's sleep.

Again, the most important and the first personal approach to the patient should be in terms of ruling out any possible physical disorder. Few other things will so shatter the morale of a ward as will psychologic treatment of a patient who, it is later discovered, has a physical basis for his ills. The physical examination should be thorough, and especially directed toward those parts about which the patient complains. The results of the examination, if negative, should be immediately conveyed to the patient. Where there is any doubt of the efficiency of the clinical examination, a laboratory examination, an x-ray, and E.K.G., a blood count, etc., should be made. These laboratory reports carry with them great psychotherapeutic value. Only rarely should one begin psychiatric therapy without such preliminary physical examination.

As soon as possible after admission, a fairly complete psychiatric history should be taken of each patient. The purpose of such a history is to determine both the nature and intensity of the emotional precipitating factor which brought on the neuropsychiatric state, and the kind of psychopathologic background present in the patient. The first part may be easy or difficult. Often the patient can relate the experience on direct questioning. Often he will be blocked and become emotional about the experience and then be unable to tell what happened. In such instances, one can use three methods of unearthing the emotional trauma: hypnosis, free association, and narco-analysis with sodium amytal. The first method, hypnosis,¹ may be practiced as described elsewhere in this book. When the patient is "under," he is then asked to relate what happened when he was so severely shocked emotionally. By the second method,² also described elsewhere in this volume, the patient may be able to bring out the emotional trauma which he sustained. The third method³ consists of semi-narcotizing the patient by sodium amytal and then questioning him when his consciousness is clouded by the drug. It is of the utmost importance to ascertain the exact nature of the emotional trauma which precipitated the neurosis, for the man often cannot be "cured" until he understands intellectually and *re-lives emotionally* his precipitating experience.

¹ Vide p. 230.

² Vide p. 144.

³ Vide p. 450.

The second purpose of the examination—to determine the patient's emotional background—is of value in prognosis and solution of therapy. A long case study is not essential for the “normal-man-suffering-from-emotional-trauma” and one should begin by obtaining a rough sketch of the patient's birth data; his school record; the age of beginning to work, the kinds and steadiness of his work; his early attitude towards sex, masturbation, and heterosexual relations; the data on marriage, and the number of children; the responsibilities of ordinary life before the war; and a brief history of his course in the war. The physician needs this general orientation for the setting of the next questions on the kind of emotional adjustment in childhood, the existence of physical symptoms which may provide clues as to the presence of tension, the emotional state in adolescence, his goals for the future, the ambitions and frustrations of his work, and his hopes and plans just before the onset of war, and his entry into the army. This last information is of especial value; for the frustrated hopes of the man before entering the army may have continued to disturb and so have furnished the basis for the severity of the symptom.

This history should be obtained if at all possible. Several interviews may be required. These interviews should be done with every consideration for the patient's feelings, and in special rooms out of earshot of other men; for intimate, personal problems will otherwise not be freely brought up. Moreover, the time spent on such a history is repaid many times in terms of shortening the man's illness; and the rush to “get men well fast” is self-defeating if adequate knowledge of the patient is lacking.

In passing, it may be mentioned that many of the “quick cures” fail to hold when the soldiers are returned to the front.

After the history is obtained, specific discussions should be begun with the patient. These should be held privately, and again because of the danger of gossip, every effort should be made to keep each man's affairs private. Once it is rumored that what one tells the physician will either become common property or will be used against him, patients will refuse to talk freely. The purpose of these specific discussions is to make the patient fully conscious of how the precipitating factors operated, and to change his attitudes towards these factors so that he is no longer affected by them. This change in attitude can be brought about by discussing the specific emotions which created his symptoms, showing the patient how they operated via the autonomic nervous system, and discussing the best methods of reacting to such situations. Repeated

discussions together with reassurances that the man is "not crazy" but is under understandable tension helps the morale, and in turn, the cure. On subsequent occasions, the man is shown how he has always reacted to emotional situations with an over-response, and how it was not his shirking of duty, but his over-conscientiousness that brought on his existing tensions. Specific examples from his past life are to be given him. Such discussions should give the soldier an understandable background for understanding why he reacted as he did, and how and why he needs to change not only his reaction to the precipitating emotion in the army but to all general emotional tensions in his life.

When a man is overly sensitive and overly fearful, one should *desensitize* him, first by repeated discussions, as outlined above, and, second, by graduated return to normal activities of military life. One may thus have such men participate in military drill for a short period each day, then graduate to rifle practice, then enter rooms with special amplifiers to duplicate the sounds of battle: all in an effort to desensitize the man to his special fears. Before return to actual combat there should be actual battle practice with live ammunition. These desensitizing steps should be carried out gradually, very much after the manner of injecting small but increasing doses of pollen to desensitize a man to hay fever. The initial "doses" should always be small enough for a man to adjust to.

After several days to complete the initial examinations, and after specific conversation with the patient, he should be asked to join a group psychotherapy class. There the formulations should be presented, much as discussed earlier in this chapter. In addition, individual men should be questioned about their own symptoms. This attack upon the patient's privacy will at first be disturbing to him, but when, at first, only general kinds of symptoms are inquired about, and when the next man in the group has voluntarily expressed his symptoms, much of the embarrassment will be lost. As each symptom is brought up, a discussion as to its meaning should be held: discussion both by the physician and by the patients. Such discussion removes the symptom from the realm of the strange, mysterious, and shameful, and brings it into open view where, as common knowledge, it can be faced frankly and openly. Moreover, there is a mutual helpfulness which results among the men in the group. Such classes should be held daily, for an hour or two.

Adjunctive treatment in the form of hypnosis is of value. Its

use should be limited and restricted to resistant cases, and when the personnel is limited. Hypnosis, despite all its advantages carries with it the aura of a cure's being brought about through some mysterious means and without any effort by the patient. As a result, the patient's emotional difficulties remain unsolved; and although he may have his symptom temporarily removed, it is only too liable to return since the fundamental emotional difficulty remains. However, hypnotism is of value when used in conjunction with psychotherapy, in cases which are otherwise resistant. The technique of hypnotism has been described in Chapter VI.

It is possible to hypnotize patients in a group as well as individually. Such work has already been reported with army men. In group hypnosis, one aims at achieving the second phase of hypnosis wherein suggestibility is markedly enhanced and catalepsy may be obtained. In the procedure, one has a group of ten to fifteen men, seated in comfortable chairs. An initial explanation of the mechanisms of emotion and their manner of producing tension is given. This preparatory phase introduces the men to the concept of "mental power" in producing physical tensions. The group is then informed that they will be taught how to relax and that during the next period they should follow suggestions without questioning. They are then asked to seat themselves comfortably in their chairs, put aside any books or cigarettes, place their hands in their laps and to stretch out their legs. When they all seem to be comfortable, they are then told to concentrate upon their hands, to feel how heavy they become, to feel even some "drawing" sensations therein. "The hands get heavier, and the relaxation sweeps up to the forearm, then to the shoulder. Notice how the muscles of your shoulder sag, as they become relaxed. Now in the same way your feet become heavy. The heaviness increases, and how your whole leg is heavy and relaxed. Notice the way your knees sag. The heaviness sweeps up your thighs, into your abdomen, into your chest. Now take a deep breath and relax it with a sigh. Good. Now your jaw relaxes, you can just feel your jaw muscles loosen. Your cheeks relax and the tension in them is gone. Now your eyes relax. Close them. The eye muscles are relaxed entirely. Now the forehead is relaxed. Your whole body is relaxed. You are completely at ease. With body relaxation goes mental relaxation. Your mind 'relaxes.' Your mind is completely blank; it is free. No thoughts or worries are in it. You are completely relaxed, mentally and physically. You are so relaxed you actually can go to sleep. Go to

sleep. Sleep. Your whole body and mind is relaxed. Sleep, deeper, deeper. You go into a deep relaxed state of complete sleep. Sleep. (Repeat the word sleep many times.)"

After having gone through this procedure slowly, in a low tone of voice, in a quiet room, darkened and without interruptions, one then proceeds with the psychotherapeutic suggestions. If one or two persons smile during the talk, pay no attention. If some remain with their eyes open, smiling, or even giggling, motion them to keep quiet. The "atmosphere" should not be altered or antagonized by making any vocal suggestions which interfere with the one thought—relaxation. The therapeutic suggestions are directed towards: (a) the general orientation of emotional control and (b) the specific illnesses. Thus:

"In this state of relaxation you feel at peace. Your mind and body are relaxed. Troubles and worries are absent. You are at peace. You have confidence in yourself; you are able to do whatever you know is right. You are at rest, mentally and physically; and when a man is at rest he is not afraid. You no longer have fear. You have a quiet courage, one that understands. Keep on being at peace. You will find a feeling of hope, of cheerfulness. You are mentally relaxed. Etc."

"Now you Jones, your relaxation is perfect. There is no tension in your muscles or in your mind. You are very well relaxed. The tremors have disappeared—because you are at rest. Stay at rest. Let everyone stay at rest. Your whole bodies are relaxed. Your minds are relaxed. Don't think of anything—not even of what I'm saying, just be relaxed. You, Smith, are very well relaxed. This arm of yours is no longer limp. See, when I pick it up you move it. Good. When you leave, you'll find it'll be all right. And you Thompson, your eyes are completely at ease. They've relaxed very well. You'll find that with your mind free, you'll see very well. Your sight will come back perfectly." (Such monologue should continue till all men have been personally talked to about their specific ailments.) Then the class is left with the general statements "You've all learned to relax. Practice this mental and physical relaxation when you get back to your beds. You'll find your symptoms clearing away quickly. Now everyone gradually open his eyes. Be still for a while. Just rest. Now go back to your bunks and sleep for a little while; I'll see you later."

Such a hypnotic procedure will find most men in the second stage of hypnosis, one or two in the third state of complete amnesia, and one or two skeptics. The latter should be quickly summoned and

their attitude discussed, emphasizing not any lack of cooperation, but stressing the fact that they have failed in learning how to relax, and that if they wish to get well, it is of value to them to practice this procedure. One should avoid showing signs of irritation at their skepticism, for antagonism will interfere with successful results later. Stress that the procedure was not hypnosis but relaxation.

From the first day of admission to the hospital a well-planned routine of diet, rest after meals, and physical exercise should be planned. Patients who are without organic illness should, wherever possible, be dressed in their own clothes and out of bed. Remaining in bed after the first days required for the examination tends to make for invalidism. Where there are such disabling defects as symbolic blindness or paralysis, other patients should aid in dressing these patients and taking them to recreation rooms or to occupational centers. For those who are physically active, a routine of useful work, such as making bandages, cutting splints, even making furniture for the hospital should be encouraged. A program of games should be carefully planned with a view to interesting the patients in ideas other than their own, and in encouraging social activities.

Definite social affairs should be arranged. If dances are possible they are desirable. If not, parties, with the entertainment provided by the men should be encouraged and aided. The spirit of self-help, of self-direction, of self-discipline should be fostered in the group; for it will inevitably reflect in the morale of the individual soldier. Above all, these men should be treated as intelligent and self-respecting citizens who are not so much to be ordered as to be led.

As these men improve they should be transferred where possible to wards or groups of improved patients. These transfers should be very gradual in those who are not quite certain of their improvement, and very rapid in those who show signs of overcoming their "exhaustion" quickly. Groups of men in comparable stages of improvement should be organized.

Before the men are returned to their units, they should have the preliminary training in military activity as outlined above under desensitization. In the last war, many men who were "cured" broke down as they were entraining for the front line, and many others were again ill on the battle front. Consequently one should endeavor to place the men in situations of stress before they are finally discharged; for if they are to "break" they can be more

quickly and effectively treated in the hospital than at the front. The process of desensitization may bring forth some minor symptoms which can then be discussed by the therapist and remedied. Again, the leader of such training groups should beware of using terms in anyway implying cowardice; for these men need encouragement, and most of them have already called themselves worse names than anyone else can.

Patients with severe neuroses or with psychotic states should be dealt with as described elsewhere in this volume. The use of shock treatments may be of value. Yet, when these men have failed to recover in the neuropsychiatric centers, it is far better to evacuate them to base hospitals for treatment than to spend in therapy the enormous amount of time required, time which is more valuable for other uses.

In the base hospitals, the patients should also be segregated according to diagnosis as well as to severity of illness. The men who enter the base hospitals for the first time for treatment of emotional illnesses should be treated as are those who are admitted for the first time in the front line hospitals.

In the case of those men who have suffered from severe neuroses, an effort should be made to return them to civilian life as quickly as possible in order to avoid the possibility of chronic invalidism. This return to citizen life should be preceded by a thorough understanding of the emotional background of the patient, together with an analysis of the kind of social situation¹ to which he is returning. In addition, an effort should be made to train the man for some occupation and to secure for him a position in which he will be most likely to adjust. Such prophylactic work will do much to prevent these men from breaking down repeatedly and returning to the hospital again.

¹ The services of a psychiatric social worker are invaluable.

APPENDIX

PSYCHOANALYSIS

MANY persons, without understanding the significance of the term, speak of a patient's being "psychoanalyzed." Psychoanalysis may not be psychiatry; and the study of a patient's personality or mental status is often not psychoanalysis. This term was first coined by Dr. Freud; and when some of his disciples (primarily Jung and Adler) broke away from him and used the same name for their respective schools, Freud insisted that the term "psychoanalysis" be restricted to mean solely his individual school of thought. By common consent, therefore, when one uses the term "psychoanalysis" by itself, he properly means the psychology of Freud.

Psychotherapy was used and formulated for many years before Freud; but he was the first to create a system of dynamics of mental life and to formulate a comprehensive theory on the laws of emotional expression in human beings. His formulation, although generally recognized to be the most important initiator in the study of psychologic dynamics, has nevertheless been the subject of bitter controversy. Many authors insist that Freud has overevaluated the undoubtedly important role of the unconscious, that he has overemphasized the role of sex in the development of every human being, and that he has built a fantastic and scientifically unsupportable hypothesis on these exaggerations. On the other hand, his disciples insist that there is no other method of substantial value which understands and formulates the laws of mental activity.

Psychoanalysts are not required to be medical men. Any one who has fulfilled the requirements is eligible to be a practising psychoanalyst. Psychoanalytic societies have been formed, however, to which membership is rigidly restricted. To be properly qualified in America, for example, the candidate must have undergone a training analysis which lasts from one to three years; and then he must have analyzed three patients of his own under the supervision of an accepted analyst. An analysis consists of seeing the patient or the physician an hour a day, five or six days a week for a year or more as may be considered necessary. Obviously,

such an expensive and lengthy procedure, limits many persons from undergoing such treatment or such training.

A more specific outline of Freudian concepts will be given below. *In summary*, however, it is as follows: Every person (and not merely those who have symptoms) passes through several stages before the age of five. The first stage, occurring quite early, is the *oral* erotic phase in which the child centers his attention and derives most of his pleasures from sucking. If an adult becomes fixated at this level or regresses to it, he continues to get most of his pleasure out of oral eroticism. Quickly following this stage is the *anal* erotic phase, wherein the child centers his attention on the feces, and he may enjoy passing his stool or retaining his stool as an expression of this eroticism. Next comes the *phallic* stage in which interest is primarily in the genitalia. Having passed through these stages, or coincidental with them, the male child develops an *Oedipus complex* which is an incestuous desire to have sex relations with his mother. The girl develops an Electra complex with an incestuous desire for the father. This complex is strong; and, still under the age of five, the boy comes to realize that his desire for his mother is resented by his father; and that if he continues with the desire, his father will injure him. This injury will be a castration which to the young boy means cutting off the penis as well as the testes; and this fear results in the *castration complex* (which also may persist later in life). As a result of this castration complex the boy (still less than five years old) gives up his incestuous desire for his mother, and so solves the Oedipus situation. Should he fail to solve it, the Oedipus complex will remain strong and he will suffer from personality defects which may lead to neuroticism, etc. The girl goes through a slightly different process, according to Freud. At an early age she develops a *penis-envy*, feels that she has been castrated, and blames the mother. She comes to desire to be given a child by her father, and develops hostility against her mother. This Oedipus situation is only slowly resolved because her wish for a child is never fulfilled and because of threats of loss of love in connection with her masturbation. All these phases occur before the age of five; after which there is a period of latency until puberty at which time there is a recrudescence of the Oedipus desire. Alexander believes that aggressive impulses are felt toward the parent of the same sex and rise out of a death instinct.

Psychoanalysis is based on understanding the operation of

these forces which exist in the unconscious (preconscious and subconscious), where they serve to motivate most human actions. Further mental life is divided into three spheres of interest: the Id, which corresponds to the colloquially known "beast-like instincts"; the Superego, which struggles against the Id, and corresponds to "conscience"; and the Ego, which is more or less the conscious person and the resultant of the other two. The actions of the Id, Superego and Ego determine the reactions of the personality. Psychologic dynamisms are built up on this basis.

The technique for determining these factors in the patient consists of: (a) free association,¹ and (b) dream analysis,² and (c) a certain amount of interpretation furnished by the physician at strategic points in the analysis, "in order to overcome the patient's resistance." Transference enters into all analytic situations, positive transference being an intense love for the psychoanalyst, and occurring because the patient finds an opportunity to reenact the infantile child-father type of relationship, while negative transference is an intense hate of the analyst.

BASES OF PSYCHOANALYTIC CURES

As previously stated, the patient who is being treated for a neurosis is analyzed an hour a day, five to six days a week, for a period varying from six months to three or four years. This time is spent in free association and in interpretation. Cures are not more commonly obtained by psychoanalysis than by eclectic psychiatrists, and *what cures are achieved* through the psychoanalytic technique of treatment occur because its therapeutic value lies not in its elaborate and questionable superstructure of concepts but rather in *four very simple elements*. In the first place, the patient finds in the analyst a sympathetic, non-critical listener.³ In itself, being able to talk freely, without fear of condemnation, serves to release tension. In the second place, the patient discusses his disturbing and distressing attitudes at such length and in such detail that he becomes desensitized to them.⁴ Third, through such discussion, moreover, he learns to view his problems objectively, to lose his sense of guilt or self-blame.⁵ Finally, he comes to realize that his symptoms have little significance other than as the expression of underlying emotional problems⁶; the understanding of the fact of an emotional basis is helpful, even though theories about this fact may be erroneous.

¹ Vide p. 144.

² Vide p. 150.

³ Vide p. 142.

⁴ Vide p. 182.

⁵ Vide p. 65.

⁶ Vide p. 219 ff.

These same goals can be achieved far more simply and directly by the therapy as advanced elsewhere in this book, and with the added advantage that not only is the patient taught thereby to understand and be tolerant of his various immature reaction patterns and "complexes," but also he is given a technique for actually meeting and solving problems as they arise. Moreover, the mental hygiene concepts advanced in our previous chapters are so inculcated into the patient that they become automatic reaction patterns and not merely intellectually appreciated theories.

INDEX

A

- ABDOMINAL viscera, relation to diencephalon, 304
 Aberrant energy expression, 257
 Abnormality *vs.* normalcy, 318
 Abortions, 330
 Abstinence symptoms, treatment of, 470
 Accepting
 responsibility, 265
 inability (case), 322
 situations (case), 320
 Access (to drugs), 467
 Acetanilid, 466
 Achieving the possible, failure, 208
 Acid stomach (case), 371
 Acne in epilepsy, 484
 Action, control of, by psychopathic person, 464
 directed by emotional responses, 134
 Activity, fluctuations of, 286
 in depressions, 420
 Acute illness, cause of insomnia, 336
 Addiction. *See* Drugs.
 vs. habituation, 466
 Adjustability, attitude essential for physician, 225
 Adjustment to environment, Ch. VIII
 in therapy of feeble-minded, 490
 of idiopathic epilepsy, 483
 Adjuvant therapy, 137, 222 *ff.*
 Adjuvants, use of, 131
 Adolescence, 423
 arousal of sexual desire, 102
 cold hands, 317
 menstrual irregularities during, 329
 Adrenal - sympathetic - vegetative system in orientation of organism, 241
 Adrenalin, increased secretion of, 71
 Adult
 sex difficulties (origin of), 105
 Advice, 196
 relative value of, 204
 therapy of stress (case), 140
 Affect changes, 431
 Age of onset of symptoms, prognostic significance of, 259, 268
 Aggressiveness, 104
 excess of, to be avoided, 208
 over compensative, 175
 Agitated depression. *See* Depression.
 Aimless desires in psychoneuroses, 209
 Alcohol, 464
 effect on cellular activity, 472
 Alcohol in old age, 385
 on epileptics, 480, 482
 type of response, 472
 tolerance, 472
 withdrawal, 475
 Alcoholic epilepsy, 375
 paresis, 480
 psychoses, 21, 370
 Alcoholics, institutionalization of, 475
 Alcoholism, 25, 371, 464, 471
 cases, 261, 310, 473, 474
 cause of psychoses, 355
 conditioned reflex treatment, 476
 escape mechanism (case), 473
 in mild manic depressive depressions, 474
 in physiologic depressions, 416
 increased sex desire, 118
 injury to cortex, 145
 morphine to be avoided, 373
 poverty, 464
 skin symptoms, 318
 therapy
 hinderances, 475
 removal of basic factors, 475
 Allergy, 319
 role in asthma, 92
 Alteration in activity in manic depressive depression, 398
 Alternating moods in schizophrenia, 431
 Alzheimer's disease, 393
 Ambition
 cause of withdrawal, 73
 changing trend of, 250
 drives, effect on skin, 317
 tendency to diminish, 284
 neurosis producing, 213
 questions about, in therapy, 144
 tension producing, 250
 thwartings (case), 331
 Ambivalence, 47
 case, 81
 definitions, 47, 80
 lack of emotional emancipation, 203
 Amblyopia, 321
 Ambulatory
 insulin \bar{H} , 448
 Amenorrhea, 329
 cured by hypnosis, 96
 result of overconcern about sex, 96
 Amentia, 23, 486
 Amnesia following epileptic equivalent, 482
 in hypnosis, 230, 234

- Amnesia in hysteria, 40
 symbolic (case), 80
 Amytal in insulin coma, 448
 Anabolism in dreams, 150
 Anesthesia, 38
 in hypnosis, 235
 of cornea, 97
 of thighs (case), 318
 result of conversion, 75
 sensation of, 316
 stocking, 38
 Anal
 sphincter tension, 310
 Analysis, necessity for, 133, 138, 192, 295
 art of, 134
 of background (psychopathic personalities), 464
 of dreams, 152
 of emotional elements, 334
 of experiences, 195. *See also* Psychoanalysis.
 of personality difficulties, 140
 of physical, social, and attitudinal factors, 127
 of possible solutions, 198
 of social factors, 131
 of specific attitudes, 131
 Anger, effect on breathing, 300
 on gastric secretion, 94
 on heart, 88
 on intestines, 310
 on skin, 316
 hinderance to relaxation, 249
 implication of self anger, 196
 in schizophrenia, 431
 normal expression of, 216
 outgrowth of emotional thinking, 193
 self-reflexive nature of, 251
 suppression of, 250
 Angina pectoris, 296
 in Chinese, 90
 in negroes, 90
 in terms of "spasmogenic aptitude," 90
 Anorexia. *See* Appetite.
 Anoxemia (cerebral) in metrazol therapy, 448
 Antagonism, 195
 technique of overcoming, 179
 Anticipation, 83
 case, 330
 nature of, 210
 Anticipation *vs.* realization, 83
 Antisocial acts in drug addiction, 466, 468
 financial stress, 170
 psychopathic states, 463
 Anxiety, 80, 259
 cases, 107, 117, 319
 caused by sex frustration, 116, 117
 menstrual irregularity, 331
 from stress (chronic), 400, 403
 Anxiety, effects of
 on heart, 88, 299
 hyperchlorhydria, 306
 pain (increases), 294
 in breathing, 91
 in neurasthenia, 31
 in pseudoappendicitis, 311
 in psychologic depression, 400
 origin from inhibitions, 243
 symptoms, 107, 117, 371, 494, 508
 Anxiety attacks, 32, 81
 cases, 166, 269, 273
 Anxiety depression
 result from masturbation, 108
 case of, 146
 "Anxiety hysteria," 36
 Aphasia
 symptoms, 364, 397, 456
 Aphonia, 327
 in hysteria, 36, 92
 result of conversion, 75
 in stuttering, 40
 therapy of, case, 327, 328
 hypnosis, 230
 cases, 177, 327
 Appel (and Bond)
 See Bond, 463
 Appetite, loss of, in physiologic depression, 371, 405, 415
 Arsenic psychoses, 377
 Arteriole spasm in emotional hypertension, 299
 Arteriosclerosis in schizophrenia, 424
 Arteriosclerotic
 brain changes, therapy of, 280
 degeneration, 23
 dementia, 381, 394
 Arthritis, 455
 Asceticism *vs.* self-discipline, 220
 Assets and liabilities, 207 *ff.*
 evaluating (case), 319
 Association disturbances, 427
 Associations, selection of basis of thinking, 147
 Astasia abasia, 36
 Asthenic physique, 422
 Asthma, 92, 275, 302
 case, 302
 cause (theories), 302
 characteristics of emotional tone, 302
 expression of fatigue, 248
 "psychic" disease, 302
 (hysterical), relation to pneumonia, 259
 persons subject to, 303
 role of sensitizing proteins, 303
 therapy of, by hypnosis, 92
 psychotherapy, 92
 Atropine in therapy of epilepsy, 484
 Attachment to family, normal, 203
 psychoneurotic, 203
 Attention, lack of, and pseudo defects, 351, 468

Attention, problem of, in physiologic depression, 405
 secured through symptoms, 284
 substitute for sex contact, 271
 Attention-getting mechanisms, basis of, 78
 Attitude, energy release, 254
 neurodermatosis, 316
 of criticism, 132
 of martyr, 227
 of physician, 226
 of society toward masturbation, 108
 toward sex (child's), 101
 stress, 157, 165
 (adolescent's), 102
 Attitudes
 general, 171
 arbitrary separation from specific, 177
 automatic nature of, 176
 civilian, 498
 cultural patterns, 59, 174
 emphasis on retraining, 178
 of psychoneurotic patients, 68, 175
 of the aged, 388
 relation to specific, 177
 removal of, by retraining, 136
 treatment of, 138, 183
 immature, 189
 influence upon form of depression, 281, 282
 kinds, 63, 174
 rationalization of, 126
 specific attitudes, 177
 dependence upon general attitudes, 177
 emphasis on removing unconscious memories, 178
 therapy of, 131, 136
 to be brought to conscious attention, 178
 toward environment, 63
 unreasoned, 126
 Auditory hallucinations, 39, 325
 Aura in epilepsy, 481
 Autochthonous ideas, 434
 Auto-erotism, result of withdrawal, 73, 107
 Automaticity, natural to organism, 126
 of general patterns, 192
 Autonomic nervous system, definition of, 85 (footnote)
 in relation to frequency of urination, 314
 to heart, 88
 overactivity of, 31
 schizophrenia, 342
 Avocations, value of, 247
 Awareness during hypnosis, 236
 necessity for, 223
 of physical functions, 297

B

BENZEDRINE
 in alcoholism, 479
 in depression, 421
 Birth
 injury cases, 488
 trauma, cause of feeble-mindedness, 488
 Bladder as affected in hysteria, 95
 in tension, 95
 Blepharospasm, 96
 Blocking, 430
 Blood
 effect of hypnosis, 86
 platelets, effect on, of excitement, 88
 pressure as affected by emotion, 90
 by fear and hate, 71
 chronic elevation of, 299
 cortical influence, 359
 low in schizophrenia, 424
 medical procedures, 299
 retraining attitudes, 299
 temporary rises, 298
 variations in, 298
 sugar in diabetes, 87
 produced by excitement, 87
 "Blueness" of depression, 281, 414
 Blushing, 318
 abnormal, 318
 case, 69, 295
 from emotion, 98
 symbolic symptom, 43
 tension, 43
 therapy of, 318
 Blurring of vision, 321
 Bogen, H., 94
 Bombing and neuroses, 494, 510
 Bond (and Appel), post-encephalitic children, 463
 Bonjour, J., 99
 Boredom, case, 67
 induced by lack of work, 255
 resulting in tension neuroses, 255
 Bradycardia, result of tension, 89
 Brain
 change in alcoholism, 475
 damage, factor in prognosis, 259
 relation to behavior disturbances, 280
 in relation to stomach, 304
 trauma, cases, 164, 281
 characteristic symptoms, 280
 in connection with epilepsy, 480
 resulting in personality changes, 280
 therapy of, adjusting environmental demands, 164
 discussion with relatives, 164
 tumor, 25, 396, 483
 and epilepsy, 480, 483
 and psychoses, 355
 Braunn, W., 93

- "Breakdown," variations of, 276
 Breathing difficulty (cases), 91, 112, 200
 Bromides, 466
 avoidance in treatment of delirium, 379
 delirium, 377
 use in treatment of epilepsy, 483
 Bronchial asthma. *See* Asthma.
 Bucciardi, Giulio, 87
 Bunnemann, O., 98
 Burning
 areas on head, 341
 in stomach, 305
 case of, 415
 of skin, 318
- CAFFEINE, 466
 Calcium content of blood, effect on, of hypnosis, 86
 Calculation and cortex, 358
 ability in psychosis, 353
 Camps, value for relaxation, 264
 Cancer, case, 68
 Cannabis, 466
 Cannon, W. B., 85, 86, 88, 93
 Carbon dioxide, removal from blood, 300
 Cardiac
 disease, frequent cause of death in schizophrenia, 399
 treatment with morphine, 467
 disturbances, effect on personality, 343
 failure, caused by fear, 89
 irritability aroused by anger and fear, 88
 pain, 30
 explanation of, 295
 result of tension, 296
 spasms, 30
 symptoms after large meal, 298
 palpitation, 297
 Cardiovascular-renal system diseases in manic depressive depression, 399
 Cardiovascular system as affected by emotion, 88, 359
 Castration
 complex, 176, 527
 Catabolism in dreams, 151
 Catalepsy (schizophrenic), case, 437
 in late schizophrenia, 434
 in second stage of hypnosis, 234
 Catalyst
 role of physician, 130, 176
 Catatonic schizophrenia, definition of, 25, 434
 Central nervous system, disturbance of, 30
 Cerebellar tumor, 320
 Cerebral
 anoxemia in metrazol therapy, 448
 arteriosclerosis, 394
 cortex, organic changes in organic psychoses, 344
 infections, cause of feeble-mindedness, 488
 Channeling, excess energy, 248
 Charlatans, 134, 237, 391
 use of suggestion, 174
 Chest pains, 30
 Childhood influences, general reaction pattern, 266
 in Hebephrenic schizophrenia, 434
 Child's aggressiveness, 175
 imitation of attitudes, 175
 personality, 266
 Children
 asocial, 175
 attitude toward sex, 101
 behavior problems, cases, 162
 mental retardation, 163
 necessity for leading own lives, 303
 primitive expressions, 206
 schooling, 498
 visual acuity, 321
 work habits, 256
 therapy of, 160, 161, 260
 Chinese, angina pectoris, 90
 Chloral, 466
 Choking sensation, case, 312
 Cholesterol as affected by emotion, 86
 Cholinergic fibers in perspiration, 317
 Chorea in emotional children, 278
 Chronic
 invalid (case), 282, 335
 masturbation (case), 109
 neuroses, 493
 Cigarette addiction, 466
 "Circular insanity," 403
 Civilian morale, 496
 Clang association, 427
 Claustrophobia, 58
 Cocaine, 466
 stimulant, 469
 type of person choosing, 467
 Coffee addiction, nature of, 466
 Coitus difficulties, 103
 ignorance with reference to, 103
 withdrawal (case), 112
 Cold
 feet, 31
 hands, 31, 316, 317
 sweats during drug withdrawal, 469
 wet packs, 378
 in therapy of insomnia, 340
 Colitis, 30, 56, 92
 effect on personality, 95, 343
 expression of tension, 248
 from bound energy, 243
 from lowered resistance, 259
 mucous colitis, 275
 treatment of (case), 310

- Colitis, spastic colitis, cause of, 310
 explanation to patient, 181
 from bound energy, 245
 habitual nature of, 283
 relation to worry, 196
 therapy of, 278, 310
- Coma in hysteria, 40, 336
- Combat neuroses, 506
- Common sense, 124
 necessity for, 252
 value of, 225
- Community mental hygiene, 496
- Compensation, case, 209
 characteristics of, 84
- "Compensation neurosis," 280
- Compensatory
 mechanism, 205
 manifestation of intolerance, 197
 masturbation, 109
- Complaints, focal nature, 293
 in agitated depression, 414
- Complications of metrazol therapy, 454
- Concentration
 difficulty of, in physiologic depression, 405
- Condensation, 50, 428
- Conditioned reflex treatment of alcoholism, 476
- Confabulation, definition, 151, 375
 in alcoholism, 480
 in dreams, 153
- Confidence, 142
 in self, 63, 205, 497
 increased by achievement, 247
 by physician's definiteness, 135
 by suggestion, 225
- Conflict, 48, 56
 causes of, 47
 developed in early environment, 52
 expressed in physiologic disturbances, 85
 expressed in self-consciousness, 65
 in connection with work, 55
 impotence and, 110
 psychologic complaints and, 56
- Confictual drives, abeyance of, 264
- Congenital influences in psychopathic states, 462
 syphilis as cause of feeble-mindedness, 488
- Conscience, absence of, in morphine addiction, 468
 inhibiting function of, 82
 resulting in impotence, 110
- Conscientiousness (over), cases, 296, 298
- Conscious
 attention directed toward attitudes, 176
 toward immature patterns, 129
 toward irritating memories, 178
 control in response to alcohol, 472
 thinking, 186
- Constipation, 31, 309
 cases, 311, 314, 331
 in depressive states, 95
 in physiologic depression, 405
 in psychoneurotic depression, 414
 preceding epileptic attacks, 482
- Constitution, effect on personality, 343
 factors in reaction patterns, 138
 importance in psychosis, 356
 types, 211, 286, 399, 422
- Constitutional differences as explaining variety of symptoms, 292
 factors, 179
 forces, 26, 27
 orientations, 157
 outlook, 185
 predisposition, 24
 as determinant of location of symptom, 293
 in functional disorders, 293
 in manic depressive psychoses, 400
 in schizophrenia, 422
 psychoses, 24
- Contagiousness of neuroses, 517
- Contempt as stress, 211
- Contraceptives, advice on use of, 167
- Control, loss of, in diseases involving cortex, 343
 of desires basis of self-discipline, 220
 of emotions through cortex, 359
 value of, 227
- Convergence, definition of, 82
- Conversion, case of, 75
 definition of, 75
- Convulsions
 in war, 494
 with insulin, 441
- Convulsive shock therapy, 450
- Cool wet packs in therapy of deliria, 378
- Cooperation, factor in recovery rate, 290
 importance of, in retraining, 129
 necessity for, 136
 pseudo-effects due to lack of, 351, 468
 technique of achieving, 181
- Cornea, anesthesia of, 97
- Cortex, functions of, 355, 357
 control of emotion, 359
 direction of neuromuscular system, 359
 modification of basic desires, 343
 thinking part of brain, 145
 in organic psychoses, 21, 24, 357
 relation to intelligence, 357
- Cortical
 activity, diminished for sleep, 340
 involved in dream production, 151
 change following metrazol therapy, 456
 control of personality factors, 343
 destruction in relation to emotion, 359

- Cortical injury in alcoholism, 145
 process in selection of goal idea, 145
 stimulation in dreams caused by emotional tone of psychologic problems and by physical factors, 152
- Cosmetic aids, value of, 160
- Costa, N., 92
- Coughing, 300
- Crawling feelings, 318
- Cretinism, 488
- Crimes of passion, result of drug addiction, 467
- Criminals, adequate treatment for, 463
- Criticism, 63, 132
 cases, 63, 71, 72
 causes, 71
 dangers of, arousal of antagonism, 133, 475
 ill effects of, on feeble-minded child, 490
 on physiologically depressed patient, 406
 on psychoneurotic patient, 142
 leading to sadism, 490
 viciousness, 490
- Criticizing in others one's own faults, 206
- Crying in agitated depression, 413
 obvious expression of conflict, 142
- Cults, dependence on central figure, 264
- Cultural
 differences, cause of marital difficulties, 165
 patterns, 174
 stress, 27
- Cunnilinguism in homosexuals, 119
- Curare, 457
- Cure of neurotic symptoms, 174
 of schizophrenia, 435
 through medication, 260
 through operation, 260
 through socialization (case), 305
- Curve of improvement, 289
- Cutis anserina (gooseflesh), 97
- Cyanosis in grand mal seizures, 482
- D**
- DANCING as tension release, 247
- Danger as met by integrative system, 88
 of overactivity during depression, 420
 of shock therapy, 450, 455
 of "urging" during acute phase of manic depressive depression, 418
- Day dreams, 79
 definitions, 78
 in schizophrenic patients, 78, 435
- Deaf, paranoid symptoms in, 211
- Deafness, 97
- Deafness based on desire to avoid hearing, 324
 case, 324
 in hysteria, 39
- Death
 following shock therapy, 450, 454
 from neuroses, 259
- Decision making, difficulty, 197
 relief from, 200
 value of, 198
 physician's, to patient, 135
- Decreased O_2 in venous blood during drug withdrawal, 469
- Defeatism, 496
- Defecation
 as affected by modern life, 309
 false modesty with reference to, 310
 rare in epileptic seizures, 482
- Defensive mechanism, 61
 of epileptics, 484
- Degenerative psychoses, 381
- Dehydration therapy, 470
- Delirium, 370, 379
 from infectious disease, 379
 tremens, 480
- Delusions, 26, 433
 cases, 167, 434
 definition of, 433
 from impaired hearing, 97
 from projection, 76
 hardened by criticism, 436
 in feeble-mindedness, 490
 in schizophrenia, 422
 in paranoid schizophrenia, 25
 psychotherapy of, 436
 of persecution, 361, 425
 case, 142
- Dementia, 366, 382, 456
- Dementia precox, *See* Schizophrenia.
- Depression. *See* Manic depressive.
 cases, 400, 404
 characteristics of, 268, 281
 due to psychologic stress, 403
 expression, 281
 helped by opiates, 237
 influenced by early environment, 54
 by personality traits, 282
 result of failure, 418
 to obtain unformulated desires, 207
 of idleness, 298
 Saturday, Sunday, holiday variety, 59
 use of benzedrine sulphate, 237
- Depressive
 equivalents, 414
 period following pregnancy, 400
 phase of manic-depressive depression, 403, 451
 somatic complaints, 415
 spells (case), 473
 states, causes of, 400

- Depressive states, constipation in, 95
 diarrhea in, 95
 variations in etiology, 400
 in intensity, 400
 swings, effect of alcohol, 472
 precipitated by, 399
 tendency, effect on psychoneurotic reaction patterns, 282
- Dermographia associated with pain over heart, 295
 result of emotion, 98
- Desensitization cases, 183, 301
 method, 182
 through discussion, 129, 182
 necessity for, 131
 toward old attitudes, 131
 use in removal of emotional tone, 178, 521, 524
- Desires
 acting as stimulant, 241
 calling forth potential energy, 242
 for pregnancy (causing menstrual delay), 331
 for recognition (case), 78
 furnish goal, 198
 necessity for controlling, 207
 modification, 250
 reducing number of, 247
 pyramided in civilized life, 243
 to have one's own way, cause of marital difficulties, 251
- Deterioration (intellectual) in the psychoses, 355, 357
- Deutsch, F., 89
- Diabetes, 87
 as affected by emotions, 87
 case, 87
- Diabetic neuritis, skin symptoms, 318
- Diarrhea, 31, 309
 case, 212
 in depressive states, 95
- Diet in treatment of delirium, 379
- Difficulties
 impossibility of escaping, 208
 to be accepted unemotionally, 198
 to be stated diagrammatically, 227
 in analysis of personality, 138
 emotional blocking, 144, (foot-note)
 repression of irritating memories, 144
 rut of thinking, 144
 unconscious repression, 138
 in finding basic causes, 138
 in therapy, results of over-training, 298
- Difficulty in swallowing, 304
 case of, 304
- Digestive disturbances caused by hate, 216
 caused by inferiority, 216
- Dilantin, use in epilepsy, 484
- Dilation of vagina by physician—usually unsatisfactory, 169
- Diplopia
 in hysteria, 39
 inconstant, 321
- Discussion, case, 166
 necessity for objectivity, 252, 422
 of attitudes, 186
 of original irritations, 186
 of patient's reactions, 131
 of sex technique, 167
 use in desensitization, 182
 value in desensitization, 129
 in therapy of marital difficulties, 166
 with improving manic-depressive patient, 418
 with relatives in cases of brain injury, 164
 of senility, 164
 in treatment of stress, 164
- Dislocations from shock therapy, 457
- Displacement, 51, 57, 428
 symptoms originating in irradiation and convergence, 82
 used by psychoneurotic patients, 52
 utilized by dictators and politicians, 51
- Dissatisfaction source of progress, 258
 value to person and to society, 190
- Dissociation, case of, 80
 difference from ambivalence, 81
 in symbolic amnesia, 80
- Dizziness, cases, 198, 200, 215, 299
- Domestic difficulties in physiologic depression, 416
- Domineering father, cases, 200, 212, 335
- Doswald, D. C., 98
- Drafted men, 502
- Dreams, 150
 analysis, 131, 150
 technique of, 153
 use of free association in connection with, 153
 causes, 151
 distressing nature of, 405
 insomnia, 334
- Dreamy apathy produced by opiates, 467
- Drinking. *See* Alcoholism.
- Drives, complication of, in civilized life, 242
- "Driving" person, subject to headaches, 341
- Drizzling in late schizophrenia, 434
- Drudgery *vs.* work, 256
- Drug. *See* Morphine.
 addiction, 25, 464, 466
 basis for, 238
 case, 238
- Drugs, 137. *See* Medication.
 disadvantages of, 381

- Drugs, dosage, 421
 of addiction, principal ones, 466
 palliative nature of, 137
 poisoning, 336
 resistance to, by depressive patient, 421
 sedative type, 137
 in therapy of manic-depressive depression, 421
 stimulating, in therapy of manic-depressive depression, 421
 therapy of delirium, 381
 of manic-depressive psychoses, 421
 tolerance, duration of, 469
 resulting in increased doses, 469
 manic-depressive patients, 422
 use of, 131
 in delirium, 381
 Drunkenness. *See* Alcoholism.
 Dunbar, W. F., 89, 93, 96
 Dynamic
 conviction, necessity for, 261
 forgetting, 68
 case, 70
 hinderance in analysis, 138
 Dynamically forgotten irritants revealed by free association, 147
 Dynamics and dynamisms, 68
 Dysmenorrhea, 30
 case, 190
 improved by psychotherapy, 96

E

- EAR
 disturbances, 97
 pains, 97
 symptoms, 322
 Echolalia in catatonic schizophrenia, 434
 Eclampsia and epilepsy, 480
 Eczema, 316, 319. *See* Skin.
 emotional basis of, 98
 case, 319
 Effort (persistent, conscientious), essential for making new habits automatic, 136
 importance of, in retraining, 129
 necessity for, in changing attitudes, 176
 systematized, essential for social progress, 256
 Ego maintenance, 45
 Egocentricity, 30, 63, 429
 Egotism, general attitude of psychoneurotic patient, 175
 Ehrstrom, Charles, 86
 Elan vital (Bergson), 247
 Electric shock therapy, 452
 treatment of war neuroses, 513
 Electrical vibrations (case), 333
 Electroencephalographic studies in connection with epilepsy, 481

Emotion

- as distinguished from emotional thinking, 193
 as it affects leucocyte count, 88
 controlled by cortex, 359
 definition of, 358, 359
 effect as shown in asthma, 302
 in peptic ulcer, 95, 306
 in pylorospasm, 95
 in spasm of intestines, 95
 on blood platelets, 88
 on blood pressure, 90
 on cardiovascular system, 88
 on endocrine glands, 86
 on gall bladder, 311
 on gastrointestinal system, 93, 304
 on heart rate, 89
 on intestinal tract, 309
 on menstruation, 96, 329, 333
 on number red cells in blood stream, 88
 on physiologic function, 85
 on respiratory system, 91
 on salivary secretion, 94
 on skin, 98, 316
 on urination, 314
 on white blood count, 88
 in connection with hypertension, 259
 with oto-rhino-laryngology, 91, 323
 with pregnancy, 329
 in relation to cortical destruction, 361
 physiologic phenomenon, 99
 stabilized through cortex, 359
 value of, 193
 Emotional
 acceptance, necessity for, 131, 134
 attitudes, duration of, 196
 belief, curative, 134
 essential in suggestion, 226
 providing moral support, 226
 blocking, 118, 144 (footnote)
 hinderance in analysis, 144
 defect (pure), rarity of, 360
 dependence, cases, 200, 302
 cultivated by parents, 204
 manifest in overemphasis on opinion of others, 218
 difficulties typical in, cause of "drawing sensations," 335
 of vaginal cramps, 335
 fullness in stomach, 305
 headache, 341
 heaviness on the chest, 301
 pain beneath sternum, 301
 tightness in stomach, 305
 vomiting, 95
 emancipation, 203
 cases, 200, 304, 331
 lack of, basis of worry, 200
 kind of emotional thinking, 203
 resulting in inadequacy, 204
 factors involved in menopause, 329

- Emotional force, establishment of, 266
 habits overcome by will power, 267
 instability, basis of drug addiction, 471
 orientation, pervasive strength of, 196
 outbreaks caused by financial stress, 170
 of feeble-minded children, 488, 489
 overtone necessary in suggestion, 226
 release by changing attitude (case), 169
 by cultivating outside interests (case), 169
 responses, determinants of action, 133
 habitual nature of, 283
 ubiquity of, as aid in diagnosis of neuroses, 294
 stability, not related to intellectual ability, 487
 strain (stress) cause of organic complaints, 56
 influence in psychoses, 342, 361
 susceptibility of feeble-minded children, 490
 symptoms developed from fear, 224
 intensified in depression, 403
 reduced by exact knowledge of illness, 224
 tension, cause of ear sensations, 323
 relieved by making decision, 200
 thinking. *See* Primitive thinking.
 basis of most immature attitudes, 193
 case of, 194
 definition of, 193
 distinguished from emotion, 193
 from logical thinking, 193
 from rational thinking, 194
 evoked when ego is threatened, 194
 explanation of its nature to patient, 195
 generic term for all immature reaction patterns, 84
 manifestation of intolerance, 205
 therapy of, 195
 unconscious nature of, 193
 tone. *See* Feeling tone.
 about possible failure, 221
 activation of dreams, 150
 case, 146
 characteristics, 194
 decreased by suggestion, 225
 developed in early life, 48
 essential for satisfactory sex relations, 113
 from unfulfilled sex desires, 270
 in anticipation, 210
 in asthma, 302
 in connection with sexual explanations, 101
- Emotional tone, influence on direction of thought, 146
 irradiation of, 146
 of psychologic problems, 152
 removal of, from irritating memories, 128
 responsible for unwillingness to bear responsibility, 221
 sensed in spite of external manner, 161
 to be removed by desensitization, 178
 by intellectual understanding, 178
 trauma, removal of, 300
 unrest, cause of alcoholism, 471
 upsets manifested in gastrointestinal symptoms, 304
- Emotionally toned illness (case), 147
- Emotionalism inculcated in early childhood, persistence of, 266
 possibility of amelioration, 266
- Emotions, sources of, 361
- Encephalitic illnesses, 369
 connection with feeble-mindedness, 488
 defective control following, 462
- Encephalomyelitis periaxialis diffusa, 355, 393
- Endocervicitis, 314
- Endocrine
 balance, effect on emotion, 359
 disturbances, cause of feeble-mindedness, 488
 dysfunction in connection with constitutional psychoses, 24
 menstrual symptom, 333
 glands affected by autonomic nervous system, 31
 by emotion, 85
 over-activity of, 30
 secretion and tension, 329
- Endocrine secretion
 increased under tension, 294
- Energy, amount of, 240
 and intelligence, relation of, 247
 aroused by sex frustration, 122
 channeling of, society's responsibility, 258
 deficiency, cure of, 256, 257
 definition, 240
 determinants, 240
 expressed, 244
 expression, 82
 dependent on physiologic swings, 245
 of feeble-minded, 257
 importance of, in therapy of neuroses and psychoses, 240
 in psychoneurotic patients, 257
 in psychotic patients, 257
 inhibited by society, 243

- Energy, mobilized, 244**
 by remembered energy, 251
 for self-preservation, 258
 for social welfare, 258
 outlets for sex frustration, 122
 in therapy of aphonia, 328
 society's obligation to furnish, 255
 value for psychoneurotic patients, 257
 output influenced by many factors, 286
 pent up, 242
 created by psychobiologic orientation, 245
 potential, 244
 problem, 241
 release, 241
 by free speech, 244
 by identification, projection, and work, 254
 primarily from psychobiologic orientation, 254
 types of, 244
 utilization by socialization, 253
 value of, to society, 258
"Enjoying illness," case, 279
Environment
 effect on personality, 343
 necessity of understanding role of, 132
 of poor sex hygiene, case, 105
 planned in therapy of feeble-minded, 490
 relation to heredity, 266
Environmental
 demands, adjustment of, case, 164
 for cases of brain trauma, 164
 of senility, 164
 factors, determination of, 138
 forces, 26, 27
 influences in functional disorder, 294
 pressure, 34
 change of, in therapy of senile disturbances, 280
 determinant of general patterns, 192
 factor in recovery rate, 290
 resistance, determinant of energy, 241
 stress, 26
 and recovery rate, 270
 cases, 53, 324, 326
 factor in prognosis, 259
 initiation and prolongation of depression, 400
 nature of, 21
 precipitation of manic phase, 401
 taboos with reference to sex, 101
 therapy of manic-depressive psychoses, 419
Epicanthic folds of Mongolian idiocy, unalterable, 488, 489
Epidemic encephalitis, 24, 369
Epilepsies, 486
Equivalent attacks of epilepsy, description of, 482
Equivalents, depressive, 414
Erection of hair, 97
Erotic
 pleasure from stroking of skin, 98
Erysipelas, psychoses, 379
Esophagus, spasm of muscle in, 301
Essential hypertension
 therapy of, 299
Euphoria in manic states, 361, 401
 effect of morphine, 468
 on gastric secretion, 94
Ewald test, 305
Examination of patient, 126, 136, 139
Excess
 energy, ways of channeling, 246, 247
 oxalates, 314
 phosphates, 314
Excessive
 concern for own desires, 463
 demands (case), 163
 mood swings, 462
 moralism in pre-schizophrenic cases, 422
Excitement
 cause of insomnia, 337
 of short respiration, 300
 effect on bile production, 94
 not to be avoided by epileptic patient, 485
 precipitating factor for epileptic attacks, 482
 therapy of, in epileptic attacks, 485
Exhaustion states, 400, 512
Explanation as reassurance, 436
 of stomach symptoms, 308
 technique of, 195
Expression
 change of, in physiologic depression, 404
 vs. repression, 252
Extrasystoles, 30, 294, 297
 case, 297
 in anxiety attacks, 32
 manifestation of tension, 297
 rarely based on any pathology, 297
 result of emotion, 89
Extrovert personalities, sex difficulties of, 273
Eye, ear, nose, and throat, 320
 retrobulbar neuritis, 375
 strain in neurasthenia, 31
FACIAL expression
 (physician's), importance of, 142
 grimaces in stammering, 41
Facing
 death, case, 223

- Facing difficulties, 208
 - facts, failure to (case), 209
 - part of mental hygiene, 435
 - refusal of psychoneurotic patients, 210
 - problems, necessity for moral support, 134
- Fahrenkamp, Karl, 90
- Faith cults, 134, 237
- False
 - cheerfulness to be avoided by physician, 222
 - ideas and ideals about sex, 273
 - modesty (case), 314
- Family
 - influence, cases, 200, 301, 302
 - development of attention-getting mechanisms, 78
 - stress (case), 308
- Paradic current in war neuroses, 513
- Fatalism, avoidance of, 185, 208, 223
- Fatigue, 27
 - after sleeping, 338
 - cases, 146, 215
 - cause of impotence, 110
 - of neurosis, 279, 512
 - expressed in asthma, 248
 - in peptic ulcer, 248
 - in spastic colitis, 248
 - in tachycardia, 248
 - in vomiting, 248
 - factor in prognosis, 259
 - in neurasthenia, 31
 - in physiologic depression, 404
 - use of benzedrine sulphate, 238
- Fear, 56
 - cause of cardiac failure, 89
 - of increase of pain, 294
 - of impotence, 110
 - of reaction patterns of entire body, 99
 - of short respiration, 300
 - caused by financial insecurity (case), 57
 - by unsatisfactory sex (case), 117
 - effect on blood pressure, 299
 - on endocrine system, 85
 - on heart, 88
 - on ulcer, 306
 - in combat, 496, 508, 515
 - in feeble-minded, 490
 - increased by lack of definite knowledge, 224
 - lessened by understanding, 211
 - lowering of threshold for epileptic attacks, 485
 - of being alone, 59
 - case of, 148
 - in crowds, 59
 - case of, 212
 - of conception, result of withdrawal, 167
 - of death,^f58
- Fear of death, associated with pain
 - over heart, 295
 - cases of, 117, 273
 - of disease, 58
 - of failure, 80
 - of fear (case), 263
 - of going crazy, 58
 - case of, 297
 - of heart failure, 296
 - of heart trouble, 57
 - of hydrophobia (case), 57
 - of impotence, 57
 - case of, 306
 - of loss of job (case), 297
 - of masturbation, 58
 - of metrazol, 453
 - of others (case), 314
 - of pregnancy, cases, 117, 167
 - cause of frigidity, 112
 - effect on husband, 167
 - marital difficulties, 167
 - resulting in amenorrhea, 96
 - in menstrual delay, 329, 330
 - of sterility, 306
 - of suicide, 58
 - of syphilis, 58
 - resulting in pseudo-appendicitis, 311
 - in spastic state in intestine, 310
- Fears, cases, 212, 473
 - expressed in dreams, 150
 - neurosis producing, 211
 - result of childhood influences, 266
- Feeble-minded and heredity, 265, 488
 - age span of, 489, 491
 - cannot be hypnotized, 230
 - energy expression of, 257
 - lack of knowledge due to, 352
- Feeling tone. *See* Emotional tone.
 - basis of reactions, 21
 - interference with making rational decision, 79
 - pleasure, 82
- Feelings of inadequacy, 216
- Fellatio in homosexuals, 119
- Fever therapy, 436
 - in paresis, 368
- Financial
 - help, therapeutic value of, 159
 - insecurity resulting in fear, 57
 - lack, cause of inferiority, 170
 - needs, 171
 - problems, 143
 - stress, cases, 110, 139
 - alcoholism, 170, 171
 - aphonia, 327
 - deafness, 324
 - impotence, 170
 - skin, 319
 - urinary, 314
 - weakness of legs, 170
 - worry, 198
 - cause of antisocial reactions, 171
 - of marital difficulties, 165

- Financial stress, cause of psycho-
neurotic actions, 171
- Finne, W. N., 87
- Finnickiness about food, 266
- Fish bone in throat, case of, 326
- Fixation
definition, 83
levels, 83
masturbation, 83
racial, 83
- Flexibility
essential attitude for physician, 225
part of mental hygiene, 497
- Flight of ideas, 361
in manic phase, 401
- Flow of speech, fluctuations in, 286
- Focal
expression of psychoneurotic depres-
sion (case), 414
point of irritation (example), 401
tension symptoms, 30
- Focusing on one symptom, 299, 334
cases of, 323, 326
- Foreboding (case), 330
- Forgetting the past, 312
- Fournier, 98
- Fowler's solution to clear up acne of
epilepsy, 484
- Fractures from metrazol therapy, 391,
456
- Frankness, necessity for, 252
- Free association, 131, 144 *ff.*
- "Free floating anxiety," 56
- "Free period" technique, 167
- "Free speech" as release for bound
energy, 244
- Freedom essential to development of
self-reliance, 205
- Frequency
of sex desire in women, 104
urinary, 32, 314
- Freud, 526
on Oedipus complex, 176
use of free association, 144
- Freudian concepts, summary of, 526
- Frigidity, 111
cases, 107, 112
treatment, 168
- Frustration, 46, 243
cases (frustration of ambitions), 327,
331
(frustration of desires), 322
stimulus for energy mobilization,
240
- Fullness of stomach and emotional diffi-
culties, 305
- Functional
disorders, mediating mechanism of,
294
psychoses, definition of, 23, 342
distinguished from organic, 344
- Fundamental
drives, 45
- Futility
feeling of, caused by unresolved con-
flict, 73
of attempting the impossible, 208
present in agitated depression, 413
- Future pleasure, long-term goal, 247
- GALL BLADDER pains, cases, 311, 312
description of, 311
secretion, 94
without demonstrable pathol-
ogy, 312
- Gain in weight, accompaniment of psy-
chotherapy, 306
- Games releasing to participant and
spectator, 253
- Gastrointestinal
disturbances, 30
case, 190
in physiologic depression, 413
symptoms, result of emotional up-
sets, 304
system and abdomen, 93, 304
tract, reason for sensitivity, 304
- General
advice, worthlessness of, 132
attitudes. *See* Attitudes.
information, function of cortex, 357
nature of emotional expression (case),
324
paresis, 23, 361, 362
patterns, automatic nature of, 192
established through childhood in-
fluences, 266
self-perpetuating, 174
reorientation, 198
state of tension, 245
resulting in cardiac pain, 296
tense attitudes, 28
- Genetic structure, determinant of po-
tential energy, 244
- Genito-urinary system, 313, 314
and gynecology, 95
- Geriatrics, 384
- Gessler, H., 86
- "Getting even," case, 71
- Globus hystericus, result of psychic
stimuli, 94, 304
- Glove anesthesia, 38
- Glycosuria produced by rage, 86
- Goal
selection of a cortical process, 145
- Goals
establishment of, 136
identification of personal and social,
257
individually rewarding, 257
long term, 246
motivated, 245
orientation toward, 136

- Goals of modern man, 158
 - short-term, 246
 - socially valuable, 258
- Gooseflesh, 97
- Gossip
 - by outwardly "sweet" person, 252
 - result of sex frustration, 115
- Grand mal seizures. *See* Epilepsy.
- Grandiose ideas, 361, 431
- Groddeck, G., 96
- Grossesse nerveuse, 96
- Group
 - hypnosis, 522
 - psychotherapy, 439, 512, 516, 521
 - separation of patients (therapeutic value of), 229
- Grudge bearings
 - cause of tension, 248
 - effect of, 70
 - infantile level of, 83
- Grunting, 300
- Guilt feelings
 - aphonia, 328
 - case, 111
 - fear of pregnancy, 330
 - masturbation, 108
 - sex trauma, 107
 - cause of tension, 248
 - caused by not liking parents equally, 175
 - in homosexuals, 119
 - loss of, through discussion, 130
 - over momentary happiness, 404

H

- HABIT, 209, 215, 303
 - deterioration in schizophrenia, 425
 - element, 124, 192
 - in alcoholism, 471, 475
 - in insomnia, 336
 - in symptom perpetuation, 283
 - importance of, in epilepsy, 482
 - of feeling, 47
 - of ideas, 47
 - of petulance, cause of marital difficulties, 165
 - of study, early inculcation of, 256
 - of work, 246
 - patterns, 245
 - short cut to achievement, 47
 - value of, 215, 256
- Hallucinations, 26, 367, 370, 372, 373
 - cases, 142, 333
 - definition, 325
 - during hypnosis, 236
 - in hysteria, 39
 - in psychoses, 325, 378
 - in paranoid schizophrenia, 25
 - in schizophrenia, 425, 433
- Hallucinosis in alcoholism, 480
- Hansen, K., 86, 92
- Harvard football men experiment, 86
- Hashish, 467
- Hate, definitions, 71, 216
 - from childhood influences, 266
- Hayfever treated by hypnosis, 92
- Head, Henry, experiments with thalamus, 417
- Head trauma, 343, 352
- Headache, 96, 341
 - cases, 108, 169, 180, 299, 312
 - due to alternation in the vaso-motor function, 96
 - emotional tension, 96
 - in neurasthenia, 31
 - intensity of, 341
 - therapy of, 341
 - types of, 96, 341
 - head too full, 341
 - over occipital region, 341
- Health column readers, 227
- Heart rate
 - and cortex, 359
 - in palpitation, 297
 - increased by emotion, 88
 - jumps (extrasystole), 297
 - pains, 295
- Heaviness in epigastrium (case), 305
 - in stomach, 305
- Hebephrenic schizophrenia. *See* Schizophrenia.
- "He does not look like a neurotic," 248
- Heller, F., 98
- Hemianesthesia, 38
- Hemianopia, accidental discovery of, 320
- Hemiplegia without psychoses, 355
- Heredity
 - and environment, case, 473
 - example of influence, 265
 - impossibility of stating relative importance, 266
 - role in prognosis, 259, 265
 - effect on personality, 343
 - in relation to epilepsy, 480
 - to feeble-mindedness, 265, 488
 - to manic-depressive psychoses, 265, 400
 - to psychoneuroses, 265
 - to psychopathic states, 462
 - to schizophrenia, 422
- Hero worship, form of identification, 77
- Heroin, 466
- Heyer, G. R., 91, 94, 95, 96
- High
 - blood pressure. *See* Hypertension.
 - caloric diet in treatment of acute abstinence symptoms, 470
 - vitamin diet in treatment of acute abstinence symptoms, 470
- Hippocrates on anger, 92
- Hippus, 321
- History of patient
 - topics for study, 344

- Hoarseness in hysteria, 40
 Hobbies to release tension, 253
 variety of, 254
 Holler, M., 88
 Home environment, cases, 74, 139, 194, 331
 Homeostasis of civilization, 218
 Homeostatic
 curve of improvement, 284
 mechanisms, 288
 phenomena, 309
 Homosexuality, 119
 Honesty essential for rapport, 135
 for suggestion, 226
 Hopelessness, sense of, in depression, 403
 Hospital atmosphere, 226
 Hourly fluctuations, 290
 Houston, W. R., 90
 Hughlings Jackson, 364, 448
 "Hungry but can't eat," 307
 Huntington's chorea, 25
 Hydrotherapy, 378, 380, 381
 in manic-depressive psychosis, 420
 Hymen, intact, 111
 Hyperchlorhydria, 30, 56, 290
 associated with worry, 196
 indicative of anxiety, 305
 of peptic ulcer, 306
 Hypercriticism
 as safety valve, 71
 cases, 71, 271
 result of sex frustration, 112
 Hyperesthesia, 38, 316
 Hyperglycemia, 86, 441
 Hypersensitivity, cause of marital difficulties, 58, 251
 Hypertension, 275, 298, 454
 associated with worry, 196
 caused by hate, 216
 by inferiority, 216
 decreased by suggestion, 225
 effect on personality, 343
 emotional basis of, 259
 permanent change, 299
 relation to apoplexy, 259
 resistant to therapy, 300
 therapy of, 299
 Hypnosis, 137, 230, 233, 519, 521
 adjuvants unnecessary, 231
 advantages over drugs, 339
 cases, 233
 amnesia, 80
 headache, 180
 insomnia, 339
 relaxation, 301, 316
 effect on blood, 86
 on metabolism, 86 *ff.*
 experiments with, 85
 effect of emotion on heart, 90
 Heyer's, 95
 production of gastric secretion, 94
 skin condition, 98
 Hypnosis, false conceptions of, 230
 group, 522
 temporary value of, 230, 261
 tendency to rationalize, 151
 use of, in pre-operative preparation, 236
 in teaching to relax, 250
 in treatment of amenorrhea, 96
 of aphonia, 236, 328
 of asthma, 92
 of excess sex desire, 169
 of epilepsy, 485
 of hayfever, 92
 of insomnia, 339
 of menstrual difficulties, 96
 of pregnancy, 96, 236
 of skin disorder (case), 98
 of stuttering, 236
 of tics, 301
 Hypnecatharsis, 156
 Hypochondria, 298
 complaints of, 366
 cases, 326
 delusions, 25
 need for assurance, 225
 phenomena, 253
 Hypomania, 401
 Hypothalamus
 affected by emotion, 328
 Hysteria, 31, 36, 361
 belparospasm, 96
 case (due to sex frustration), 118
 caused by sex frustration, 117
 cured by hypnosis, 230
 habitual nature of, 283
 hallucinations of, 236
 manifested in anesthesia of cornea, 97
 in bladder disturbance, 95
 in deafness, 97
 in defects in visual field, 96
 in monocular diplopia, 97
 in palsy, 96
 in tubular vision, 97
 Ice packs in therapy of delirium, 380
 Ideas of reference in schizophrenia, 426
 Idealisms as moral support, 220
 Idealizing wife, cause of impotence, 110
 Ideals of government, 497
 Identification, 65
 case of, 77
 definition, 77
 in energy release, 255
 with one parent, 175
 Idiocy, 23
 definition of, 487, 488
 Idiosyncrasies, 435
 Idiopathic epilepsy. *See* Epilepsy.
 Idleness (case), 299

- Ignorance about sex, examples of, 106
- Illness
 - cause of impotence, 110
 - involving total personality, 342
- Imbecile, 23
 - definition of, 487
- Imitation
 - in human behavior, 257
 - of general attitudes, 175
- Immature attitudes based on emotional thinking, 193
 - See* Attitudes.
- Impaired
 - hearing resulting in paranoid symptoms, 97
 - memory, 61
 - thinking ability caused by injury to cortex, 145
- Impatience, hinderance to relaxation, 249
- Impotence, 30, 110
 - caused by chronic alcoholism, 118
 - resulting in retention, 95
 - therapy of, 113, 114
- Improvement
 - diagrammatic picture of, 289
 - remissions in, 290
- Impulsive behavior in psychopathic states, 463
- Inability
 - to accept responsibility (case), 322
 - to concentrate, 30, 61, 281
 - case of, 117
 - in simple schizophrenia, 434
 - to cope intellectually, symptom of feeble-mindedness, 488
 - to describe feelings (physiologic depression), 406
 - to do what is asked, 406
 - to face facts (case), 212
 - responsibility, 473
 - to "feel," 406
 - to make decisions, 47
 - to take deep breath, 300
 - to think about things other than self, 400
 - logically, 418
- Inactivity, accentuation of depression, 420
 - of depression, 281
- Incentive, role in energy mobilization, 256
- Incoherence in schizophrenia, 420
- Incontinence in schizophrenia, 434
- Increased fluid
 - in brain, withdrawal of drug, 462
 - intake for concentrated urine, 315
- "Incurable disease," distorted ideas of, 224
- Indecision, 61
 - case, 148
 - characteristic of psychoneurotic patient, 135
- Indecision, common in depressive states, 62
 - disintegrating effect of, 207
 - in agitated depression, 413
 - outgrowth of early environment, 53
- Independence
 - desire for, as cause of withdrawal, 73
 - natural desire for, 203
- Individual
 - differences, 47. *See* Constitution.
 - dependence on genes and chromosomes, 244
 - in reaction to pain, 342
 - to be considered in evaluating personality changes, 286
 - general attitudes, 175
 - preference to be considered, 253, 255
- Infantile
 - level of fixation, 83
 - case, 83
 - examples of, 83
- Infections, cause of psychoses, 362
- Inferiority complex, 56, 63
 - cases, 74, 132, 139, 160, 212, 315
 - caused by childhood experience of criticism, 175
 - by early environment, 54
 - by financial lack, 171
 - by inadequacy, 132, 200
 - by inhibitions, 243
 - by physical deformity, 160
 - expressed by intolerance, 205
 - by drug addiction, 470, 473
 - by overemphasis on opinion of others, 217
 - by self-consciousness, 65
 - by worry, 196
 - of epileptics, 484
 - precipitating factor in schizophrenia, 431
- Information from relatives, 156
- Inheritance and family training inseparable, 185
- Inherited. *See* Constitution.
 - pattern, 27, 138
 - predisposition, 185
- Inhibition formation in schizophrenia, 423
- Inhibitions, 58
 - case, 212
 - detrimental effect, 243
 - individual, 263
 - removal of (case), 308
 - resulting in menstrual irregularity, 329
 - in projection, 77
 - in sublimation, 84
 - social, 242
 - stimuli for energy mobilization, 240, 245
- Initial recoveries of little value, 261
- Insanity, fear of (case), 297
- Insecurity, causes, 63, 66, 203

- Insecurity, manifested in worry, 196
 Insistence on one symptom, case, 304
 Insomnia, 27, 336, 404, 494
 cases, 117, 139, 237, 315, 513
 categories of, 336
 caused by acute illness, 337
 of manic-depressive depression, 338
 of psychoneurotic depression, 403
 therapy of, 339
 cold wet pack, 340
 diverting interests, 340
 hot drinks, 340
 hypnosis, 339
 massage, 340
 reading, 340
 warm baths, 340
 value of routine, 336
 Instability
 basis of alcoholism, 471
 of worry, 200
 case of, 213
 inculcated by environment, 175
 Institutionalization
 corrective procedures in, 376, 420, 475
 desirable for therapy of drug addiction, 470
 for care of feeble-minded, 490
 for therapy of manic-depressive patients, 420
 of psychotic patients, 369
 Insulin
 ambulatory treatment, 411
 and amytal, 448
 in therapy of drug addiction, 470
 in alcoholism, 373
 shock therapy, 441
 combined with convulsive therapy, 460
 Intelligence increase: facts concerning, 486
 relationship to energy, 247
 Intelligent quotient (I.Q.), 416
 Intellectual
 ability: relationship to emotional stability, 487
 to meet demands (feeble-mindedness), 488
 acceptance: insufficiency of, 196
 appreciation: insufficient, 261
 awareness: insufficient, 359
 capacity: method of determining, 487
 changes: tests to determine, 352
 comprehension: in relation to relaxation, 249
 conflicts, 47
 consent to change, 192
 defect: from diffuse involvement of cortex, 355
 pure (rarity of), 358
 evaluation: case (menstrual difficulty), 331
 impairment: in psychosis, 280
 Intellectual impairment, cases, 365, 371, 383
 objections: removal of, 308
 relation to personality defects, 358
 understanding:
 insufficiency of, 126, 129, 134
 necessity for, 131, 133
 role of, in removing emotional tone, 178
 value of, 186, 290
 "Intellectualized" concept, technique for implementing, 187
 Intercourse, technique of, 103
 Internal diurnal fluctuations, influence on energy output, 287
 Internalization, 65
 Interviewing patients, technique and art, 141
 Intestinal
 peristalsis, alteration caused by tension, 310
 tract, effect of emotion on, 310
 Intolerance
 based on distorted values and standards, 205
 cases of, 212, 311
 cured by understanding, 205
 manifested by compensatory mechanisms, 205
 by emotional thinking, 205
 by inferiority, 205
 by irritability, 205
 by rationalization, 205
 of others: compensatory for self-intolerance, 206
 Intoxication. *See* Alcoholism.
 Intracerebral air injection, 280
 Intrauterine
 disease: cause of feeble-mindedness, 488
 Introversion: result of withdrawal, 73
 Introverts:
 predisposed to schizophrenia, 424
 sex difficulties of, 273
 "Involutional decades," 276
 Involutional melancholia, 24, 413
 value of shock therapy for, 413, 451, 458
 I.Q.
 method of determining, 489
 of feeble-minded, 489
 Irradiation, 66
 definition of, 82
 of indecisiveness, 146
 Irritability, 30
 cases, 112, 139, 160, 213, 282, 331
 caused by chronic illness, 342
 by sex frustration, 115
 levels of, in drug withdrawal, 469
 in epilepsy, 484
 in neurasthenia, 31
 in psychoneurotic depression, 414
 in schizophrenia, 425

- Irritability, manifestation of intolerance, 205
 - normal kind, 216
 - of respiratory centers, 300
 - Irritating
 - forces, intensity of, 269
 - memories, repression of, 144
 - to be brought to attention, 178
 - case, 213
 - Irritation
 - attitude toward, to be changed, 176
 - cases, 72, 299
 - chronic: cause of insecurity, 63
 - from failure to obtain desires, 207
 - from inhibitions, 243
 - from overprotection, 203
 - general attitude of psychoneurotic, 175
 - operative though forgotten, 176
 - over non-sexual factors: frigidity, 113
 - persistence of, 126
 - removal by direct expression, 251
 - sudden: cause of insecurity, 61
 - unconscious, 126
 - Itching. *See* Skin sensation.
 - about perineum, 313
 - in ear (case), 324
 - Izquierdo, J. J., 88
- J
- JACOBI, E., 98
 - Judgment
 - function of cortex, 353, 357
 - value of physician's, 217
 - Jung
 - association test, 155
- K
- KAPOSI, 98
 - Kauf, E., 89
 - Ketogenic diet in therapy of epileps
 - 484
 - Kleptomaniacs, 462
 - Korsakoff's syndrome, 374, 480
 - Krebich, K., 98
 - Kretschmer, 422
- L
- LABILITY (emotional), 100
 - Labor pains
 - psychologic manifestation, 96
 - reduced by hypnosis, 96
 - Lachrymation, 85
 - Lack of
 - ambition in schizophrenia, 434
 - appreciation: as stress, 211
 - balance: shown by overemphasis on opinion of others, 217
 - Lack of consideration in psychopathic states, 463
 - cooperation: difficulty in determining mental age, 489
 - definite knowledge: effect on fear, 223
 - initiative in pre-schizophrenic states, 423
 - interest in late schizophrenia, 425
 - moral stamina in alcoholism, 473
 - self-discipline: factor in prognosis, 259
 - self-reliance, 218
 - Larynx, spasm of muscle in, 301
 - Lassar, 98
 - Lassitude in neurasthenia, 31
 - Laudanum, use for diarrhea, 468
 - Laudenheimer, R., 91
 - Laughing to one's self in schizophrenia, 425
 - Law
 - of association in sleep, 150
 - of contagion, 49
 - of similarity, 49
 - Laws
 - and customs, 243
 - Laziness, origin in inertia, 258
 - Lead psychoses, 377
 - Leadership, 501
 - Learning. *See* Intelligence.
 - dependent on cortex, 357
 - process marked by mistakes, 207
 - to face facts (case), 212
 - to relax, 250, 276. *See* Relaxation.
 - Leucocyte count, increase in pre-operative patients, 88
 - Levels of irritability in drug withdrawal, 469
 - Liabilities and assets, 207
 - ability to evaluate necessary, 205
 - Lie detector apparatus, 90
 - Little's disease, 488
 - Lobotomy, 460
 - Location of symptom, determining, 294
 - Logical
 - planning (case), 198
 - thinking as opposed to emotional thinking, 193
 - characteristics of, 193
 - Loneliness, effect on depression, 419
 - Loss
 - of consciousness in petit mal attack, 482
 - of interest in simple schizophrenia, 434
 - of libido, case of, 315
 - in psychoneurotic depression, 405
 - of memory, case, 365, 383
 - of weight, case, 315
 - in physiological depression, 405
 - Low
 - back pains at menses, 332
 - economic level, adjustment to, 464
 - moral code resulting in sexual mal-adjustment, 107

- Lowered threshold of pain at menses, 334
- "Lump in throat" associated with spasm of throat, 304
- M**
- MAGNESIUM sulphate in therapy of epilepsy, 484
- Maladjustment from sex relations, treatment by discussion, 166
- in childhood, factor in prognosis, 259
- Malaria, 368, 370
- Malingers, 462, 515
- Manic phase
- characteristics of, 401
- rambling speech, 145
- Manic-depressive depressions. *See* Depressions. *See also* Physiologic depression.
- alcoholism, 474
- attitude toward reality, 342
- case, 315
- caused by disturbances in automatic nervous system, 342
- effect on therapy of neuroses, 278
- heredity (case), 265
- in organic psychoses, 361, 366, 378
- often unrecognized, 283
- relation to mental attitude, 418
- swings, 287
- therapy, 417, 451
- treated by opium, 421
- type of physique subject to, 399
- Mannerisms in schizophrenia, 433
- physician trained to notice, 130
- Marital
- difficulties, 165
- case, 166
- causes:
- desire to have own way, 251
- fear of pregnancy, 167
- hypersensitivity, 251
- pride, 251
- therapy by discussion, 167
- disharmony, 104, 165 *ff.*, 416
- state: questions about, 143. *See* Sex Problems of.
- therapeutic value of (example), 298
- value of vocalization in, 251
- Married women, value of work for, 255
- Martyr attitude, 224, 284
- based on desire for recognition, 78
- Mask of face, 143
- of voice, 143
- Masochism
- cases of, 118, 263
- due to early conditioning, 118
- result of parental influence, 175
- suggestion in, 228
- Masturbation, 73, 107
- Masturbation, cases of, 74, 117
- chronic, 109
- effect of early environment, 54
- frequency in schizophrenia, 425
- in relation to schizophrenia, 110
- in simple schizophrenia, 434
- level of fixation, 83
- normal, 102, 108
- disappearance, 102
- normal frequency, 102
- over-concern about, 423
- result of withdrawal, 73
- resulting in impotence (case), 114
- in retention, 95
- understanding of, 207
- universality of, 207
- Maturity, 386
- an achievement, 188
- essential attitudes for, 204
- "Meanness" assumed part of epileptic personality, 484
- Mechanism
- by which emotion affects skin, 316
- of cortex operation: theory, 359
- Mediating mechanism, 294 *ff.*
- compensation, 205
- conversion, 75
- criticism, 64
- dynamic forgetting, 68
- identification, 65
- irradiation, 66
- negativism, 75
- phantasy formation, 426
- rationalization, 51
- sublimation, 273
- substitution, 253
- withdrawal, 27, 72, 425
- Medication, 236. *See* Drugs.
- avoidance of overdosage, 381
- of routine giving, 236
- cures by (suggestion), 260
- effectiveness dependent on associated psychotherapy, 237
- explanation of its value to patient, 237
- failure in therapy of delirium, 229
- of insomnia, 381
- case, 237
- for epileptic seizures, 483
- for insomnia, 340
- for menstrual pains, 334
- for toxic insomnia, 336
- palliative nature of, 237, 238
- specificity of, 127
- value for suggestion, 226
- variable potency, 236
- Meekness, result of parental tyranny, 175
- Melancholia, 281. *See* Depression.
- case of, 398, 413
- Memory
- earliest, 266
- following epileptic equivalent, 482

- Memory following metrazol therapy, 455
 - function of cortex, 359, 365
 - in physiologic depression (poor), 405
 - in psychoses, 352, 357
 - relation to involvement of cerebral cortex, 360, 374
- Meningitis, 369
 - in relation to epilepsy, 480
- Menopause, emotional factors of, 329, 423
- Menstrual
 - cramps, 332, 334
 - delay, 96, 329
 - case of, 330
 - caused by desire for pregnancy, 331
 - by fear of pregnancy, 330
 - difficulties and anxiety states, 331
 - case, 331
 - from inhibitions, 329
 - in adolescence, 329
 - physical therapy for, 334
 - psychologically determined, 96
 - spontaneous adjustment of, 331
 - types of, 331
 - periods, 332
 - cause of cortical stimulation (dreams), 151
 - effect on epileptic attacks, 485
 - psychosis, 333
 - symptoms from endocrine dysfunction, 333
 - from pelvic pathology, 333
 - related to sexual maladjustment, 333
 - therapy of, 334
- Menstruation, 85
 - emotional effects, 329
 - lowered threshold of pain, 334
 - relation to sex desire, 333
- Mental
 - age: difficulty of determining, 489
 - deficiency, 23
 - hygiene: attitude of, 295, 385, 435, 497
 - self-discipline, 122
 - status examination, 351
- Metabolism, 86
 - as affected by hypnosis, 86*ff.*
- Meteorologic changes. *See* Weather, 123
 - effect on energy output, 286
- Methyl guanadine, 238
- Meticulous care, expression of tension, 249
- Metrazol therapy, 451
 - cases, 315, 335, 464
- Microcephalic, 489
- Migraine, 92
- Military service, 501
- Mind: one aspect of body, 400
- Miracle cures on basis of suggestion, 260
 - temporary nature of, 261
- Mirror writing, 489
- Mistakes essential to learning process, 207
- Mobilization of energy. *See* Energy.
- Modesty, false, 309
- Mohr, Fritz, 92
- Moist palms associated with pain over heart, 295
- Mongolian idiocy, 489
- Monocular
 - diplopia due to hysteria, 97
 - vision, 321
- "Monomania" in paranoid patients, 145
- Monotomy of work, dependence on attitude, 256
- Mood
 - activity, speech, (operate as unit), 286
 - changes, 416
 - fluctuation, 287
 - in manic-depressive psychoses, 24
 - swings, common, 281, 399
 - in simple schizophrenia, 434
- Moos, Erwin, 92
- Mora, Jacob, 88
- Moral
 - issue, avoidance of making, 188
 - preaching valueless in therapy of alcoholism, 475
 - support
 - given by physician, 134, 220
 - by like-mindedness, 259
 - by suggestion, 225
 - necessary to carry out decisions, 198
 - necessity for patient's developing, 220
 - relation to ability to carry responsibility, 220
 - sources of, 220
 - value in therapy of drug addiction, 470
 - of manic-depressive depression, 418
 - vs.* coddling, 220
- Morale, 496
- Moralism, 422
- Moron, definition of, 487
- Morphine, 396, 397, 441
 - addiction, 397
 - avoidance of, in therapy of alcoholism, 373
 - use in allaying fears, 380
 - in cardiac disease, 467
 - in insomnia, 336
- Mother fixation, 83
- Motivation in energy mobilization, 245
- Mucous colitis. *See* Colitis.

- Multiple
 hemorrhages in brain after metrazol, 459
 orgasm, 113
 sclerosis, 25
 case of, 162
- Muscle
 tension from emotional tension, 63
 result of bound energy, 242
- Music
 as sublimation, 254
 effects of highly individualistic, 210
 on manic-depressive patient, 59, 406
 variations in, 254
 energy releasing, 254
- Muteness, case, 430, 437
- Mutual masturbation in homosexuality, 119
- N
- NAGGING
 as safety valve, 71
 result of repression, 253
 of sex frustration, 115
- Narco-analysis, 519
- Nausea, cases, 139, 198, 282
- Need
 of direct and personal moral support, 220
vs. artificial desire, 159
vs. feeling, 173
- Negativism, case of, 75
 causes of, 75
 definition of, 75
 in catatonic schizophrenia, 434
 in schizophrenic patients, 75
- Negroes, cardiac disturbances of, 90
- Neologisms, 427
- Neoplastic pathology, 23
- Nephrolithiasis, 96
- Nervous
 "breakdowns," 503
 dyspepsia, 93
 irritable persons, type of drug chosen by, 467
 "Nervous stomach," 307
- Nervous system
 activity of, under tension, 294
 response to danger, 88
- Neurasthenia, 29, 31
 case of, 159
 caused by sex frustration, 117
- Neurasthenic symptoms, 32
 caused by guilt feelings (masturbation), 117
- Neuritic pains, effect on personality, 343
- Neurodermatosis. *See* Skin.
 case, 272
 chronic factor in, 316
 type subject to, 316
- Neurologic examination, necessity for, 320
- Neuroses, 26, 29, 30, 342
 cause of insomnia, 336
 caused by ambitions (unsatisfied), 211
 by conflict, 211
 by difference in physical appearance, 211
 by fatigue (case), 279
 by fear, 211
 by ostracism, 211
 by physical illness, 160
 by subtle forces, 211
 by unsolved Oedipus, 176
 by war, 493
 development of, in feeble-minded, 490
 distinguished from psychoses, 342
 psychoanalytical explanation of, 176
 relation to death, 259
 to physical disease, 278
 severity of, in relation to precipitating factor, 269
 to susceptibility, 269
 type of: factor in recovery rate, 290
- Neurotic
 affections, outgrowth of emotional thinking, 194
 complaint, 289
 love compared with normal, 203
 reaction patterns, automatic nature of, 129
 manifested as psychopathic traits, 464
 symbolism created by attitudes, 126
 by reaction patterns, 126
 symptoms and changes in blood pressure and pulse, 85
 as early sign of physical disease, 124
 case of, 179
 cure of, 180
 expressed through tension and symbolism, 123
 focal point in psychoneurotic depression, 414
 tendency to fluctuate, 289
 therapy of, 123
 value to patient, 284
 tension created by attitudes, 126
 by reaction patterns, 126
vs. normal, 84
- Nicotine, 466
- Nocturnal emissions, 102
- Noises in head, 97
- Non-conformity, value of, 247
- "Normal," definition of, 262, footnote
 relative and descriptive term, 285
vs. abnormal, 84
vs. neurotic, 84, 287
vs. psychotic, 287
- Normal
 life for epileptics, 484

- Normal mental hygiene, 497
 persons (value of association with), 262
 reasoning: flexibility of, 145
 relaxed environment (value of), 262
 sex attitude and practice, 101
 swings, 285, 399
- Normalcy, range of, 285
- Numbness of skin, 318
- Nursing care, importance of, in therapy of delirium, 229, 380
- Nutrition: effect on emotion, 359
- Nymphomania, 119
 case of, 118
- O**
- OBJECTIVE**
 calmness, value of, in cases of peptic ulcer, 306
 understanding, case (aphonia), 327
vs. passive acceptance, 217
- Objectivity, 498
 desirability of, in discussion, 252
 difficulty in achieving, 194
 gained through discussion, 528
 habit formed by repetition, 209
 necessity for, 193, 198
 physician's, 142
 two-fold value of, 133
 psychiatrists' interpretation, 303
- Observation in mental states, 347
 importance of, 142
 of patient, 228
- Obsessive compulsive states, 29, 31, 36, 41, 276
 cases, 117, 183, 265
 caused by sex frustrations, 117
 expression of fixation, 83
- Obstetrics and gynecology, 328
- Occupational therapy for manic-depressive patient, 420
 negative results of, 253
- Oechsler, 94
- Oedipus complex, 176, 527
- Ointment, use for skin symptoms, 319
- Old age therapy, 384
- Onset
 symptoms: importance of determining, 140
- Operation, 385
 in absence of pathology, 260
 preferred to facing problems, 278
 therapeutic value through suggestion, 260
- Opiates, 466. *See* Drug addiction.
 avoidance in psychoneurosis, 238
 limitation for unstable neurotics, 471
 use in manic-depressive psychosis, 421, 468
 value in depressions, 238
- Opium addicts, 466
- Oppression across chest, 30
- Oral erotic phase, 527
- Organic
 complaints, 56
 factors in schizophrenia, 361, 423
 psychoses, 23 *ff.*, 355 *ff.*
 symptoms psychogenically determined, 179
- Orgasm
 definition of, 103
 effect of withdrawal on, 167
 in female, 103
 in male, 103
 unsatisfactory, 104
- Oriental philosophies, converts to, 263
- Orientation, function of cortex, 358
 in the psychoses, 352, 358
 of organism to satisfy desires, 241, 248
- Ostracism as stress, 211
- Oto-rhino-laryngology, relation to emotion, 91
- Outlets, lack of (case), 299
 therapeutic value of, 298
 cases of, 322, 326
- Outside interests, therapeutic value of, 306, 307
 cases, 169, 273, 302
 therapy of over-sex, 169
 value to parents, 303
- Over
 aggressiveness of female resulting in impotence, 110
 attachment, case, 302
 attention resulting in lack of self-reliance, 203
 automaticity indicative of adjustment on lower level, 215
 compensation in children, 175
 resulting from childhood impulses, 266
 concern about masturbation, 423
 about one's self, 30
 conscientiousness, factor in prognosis, 259
 cases, 297, 299
 dosage, avoidance of, 381
 emotional response, general attitude of psychoneurotic, 175
 emphasis, importance of noticing, 130
 on physical illness, 130, 133
 on sex, 100
 evaluation of obstacles, 227
 of one's own ideas, 63
 of opinion of others, 218
 indicative of emotional dependence, 218
 lack of self-reliance, 218
 examples of, 218
 resulting in vacillation, 218
 expectation, 249
 exposure to sex, case, 106
 gratification at success, 80

- Over intensity about getting well, cases, 315
 interest in sex, children's: due to environmental taboos, 101
 due to lack of other pleasures, 105
 protection, case of, 200
 cause of child's irritability, 202
 resulting in immaturity, 175, 203
 reactions, 22
 routinization, 48
 self-consciousness, 61
 sensitivity, 63
 avoidance of, 435
 expressions of, 65, 66
 to physician's words, 222
 serious presentation of facts, 222
 stimulation resulting in insomnia, 337
 suggestibility, 227
 training, hinderance to therapy, 296
 Overly strong sex desires, therapy of, 169
 Overnight cures, patient warned against, 226
 to be distrusted, 261
 Ovulation pain at period, 333
 Oxygen tents in acute abstinence symptoms, 470
- PACING floor in agitated depression, 413
 Pain
 beneath sternum, 30, 91, 301
 in back following convulsive therapy, 456
 in chest, case, 301
 in ear, emotional causes, 322
 case of, 322
 in stomach, 305
 over eyes, 341
 over heart, 30, 89
 associated symptoms, 295
 frequency of complaint, 295
 reacted to in individual fashion, 342, 381
 welcomed in physiologic depression, 405
 Pallor, 318
 abnormal, 318
 result of emotion, 98
 symptom of drug withdrawal, 469
 therapy of, 318
 Palpitation, 297
 associated with pain over heart, 295
 cases of, 297, 312
 commonness of, 297
 Palsy due to hysteria, 96
 Pampering, avoidance of, 135
 Panic, 496
 resulting from drug withdrawal, 469
 Paraldehyde, 466
 Paraldehyde, use in therapy of delirium, 373
 Paralogic reasoning, 434
 Paralysis, result of conversion, 75
 Paranoid
 case of, 209
 ideas, 276, 425, 434
 in simple schizophrenia, 434
 monomania of, 145
 schizophrenia, 434
 definition of, 24, 25
 symptoms from impaired hearing, 97, 209
 Paranoia, true, 434
 Parasympathetic nerve supply in abdominal viscera, 304
 Parents'
 advice: healthful attitude toward, 203
 attitude necessity of understanding, 132
 source of inferiority complex, 175
 avoidance of domination, 303
 necessity for cultivating own interests, 204, 303
 over-concern or domination, 175
 cases, 117, 132, 189, 327
 Paresis, 361, 362
 relation to epilepsy, 480
 Paresthesia, 38
 sensation of, 316
 Parkinson's disease, 355
 Paroxysmal tachycardia in anxiety attacks, 33
 Passive acceptance vs. understanding, 208
 Passivity of female, 103
 of male, 103
 Pathologic
 liars, 462
 swings, 287
 Pathology of schizophrenia, theories about, 424
 in organic psychoses, 355
 Patience (physician's), necessity for, 224
 Patient's
 facial expression, necessity for observing, 142
 willingness to change, importance of, 188
 Pattern of insecurity, pervasiveness of, 65
 "Peculiar sensations" (case), 312
 Pederasty in homosexuality, 119
 Pelvic pathology, relation to menstrual difficulties, 333
 Penfield, 280
 Peptic ulcer, 292, 306
 attacks, 414
 cases, 160, 298, 306
 expression of tension, 248
 hyperchlorhydria in, 305

- Peptic ulcer, importance of relaxation,
160
influence of emotion on, 306
relation to hemorrhage, 259
therapy of, 160
- Perfectionism, detrimental effects, 247,
267
- Perforation of stomach, 304
- Periodic drinking. *See* Alcoholism.
therapy of, 475
- Peripheral
circulation, 316
neuritis, 318
- Peristaltic waves, effect of hurry on,
309
- Pernicious anemia, skin symptoms of,
318
- Persecution complex in paranoid schiz-
ophrenia, 434
- Perseverate, 430
- Persistence, importance of, 188
necessary in hypnosis, 233
necessity for, 135, 136, 179, 187
- Personality
adjustment to physiologic change,
269
changes, 360
caused by brain injury, 280
in organic psychoses, 360
necessity of evaluating individual
differences, 285
classification, difficulty of making,
275
definition of, 45
determinants of, 356
disturbed by chronic pain, 359
immature, 118
of physician, important element in
suggestion, 226
significance and value of, 134
reactions, 45
complicated by turmoil, 47
definition of, 123
determined by actions of Id, super-
ego, and Ego, 528
relation to intelligence defects, 359
response to alcohol, variations in, 472
traits influence on form of depres-
sion, 281
type, description of extremes, 275
relation to recovery rate, 276
to type of psychosis, 343
tension in, 275
whole of involved in illness, 342
- Perspiration, 31, 317
due to overactivity of autonomic
system, 317
therapy of, 317
- Pessimism, characteristic attitude in
physiologic depression, 404
- Petersen, 123
- Petit mal attacks. *See* Epilepsy.
- Phallic stage, 527
- Phantasy, 54, 83
associated with masturbation, 109
formation, 361
definition of, 78, 79
in schizophrenia, 343, 425
result of withdrawal, 73
- Phenobarbital, 236
in therapy of epilepsy, 483
use in case, 302
- Philosophical
attitude, therapeutic value of, 297,
386
difference, cause of marital difficulty,
165
- Phobias, 58
agoraphobia, 58
anthrophobia, 58
claustrophobia, 58
erythrophobia, 58
mysophobia, 58
phobophobia, 58
syphilophobia, 58
zoophobia, 58
case, 473
- Physical
dependence on drugs, 466
difficulties, 211
treatment of, 131
disease, prognostic significance, 259,
278
disturbance (initial), determinant of
later symptoms, 292
effect on personality changes, 400
examination, case showing impor-
tance of, 179
for schizophrenia, 436
necessity for, 124, 130
psychologic value of, 124
functions, awareness of, 296
health, importance of, for sex satis-
faction, 104
illness as a relief, 278
cause of neurosis, 160
pain intensified by tension, 180
vs. "personality pain," 278
predisposition, relation to symptom
site, 293
relaxation, relation to mental relaxa-
tion, 63
security, basic nature of, 46
stimulation during sleep (dreams),
151
symptoms in psychoneurotic depres-
sion, 414
well-being, effect on energy output,
286
- Physician's
attitude, essential characteristics of,
concrete, 186
firm, 186
non-critical, 142
objective, 142
toward sexual problems, 104

- Physician's attitude, value for suggestion, 226
 interest essential for rapport, 134
 judgment, importance of, 179
 staff, value of, 229
- Physiologic changes
 case history of, 406
 cause of personality changes, 400
 during withdrawal, 462
 in physiologic depression, 416
 relation to personality, 268
 disturbances cause of cortical stimulation (dreams), 150
 mood swings, 400
 orientation, operation of, 242
 pathology, 160
 reactions, 45
 swings, determinants of energy expression, 245
 symptoms, 403
 system, training of, 359
 tendencies of schizophrenic patients, 424
 therapy often unnecessary (case), 180
- Physique. *See* Constitution.
 correlate to energy manifestations, 244
 definition of, 244
- Pick's disease, 393
- Pitressin in electric shock treatment, 453
- Placebos, definition of, 228
- Planning (intelligent), case, 198
 social, 497
- Plasticity, need for, 215
- Pleasure—pain
 basis of reaction pattern, 48
 -seeking mechanisms, 82, 83
- Pneumonia, 379
- Poise *vs.* attitudes, 275
- Politeness, dangers of, 252
 value of, 252
- Political leaders, desire for recognition, 78
- Pollock, 399
- "Polyanna" attitude, fallacy of, 224
- Polyneuritic symptoms in alcoholism, 373, 375
- Population neuroses, 495
- Post-encephalitic children, 360, 463
- Post-hypnotic suggestion, 235
- Post-infectious psychoses, 379
- Post-operative psychoses, value of shock therapy for, 381, 454
- Post-operative symptoms, insomnia, 336
 itching (case), 313
 retention, 316
- Pounding heart (case), 200
- Pouting, 83
- Poverty
 hinderance to psychotherapy, 464
- Poverty, relation to psychopathic states, 464
- Povrinskij, J. A., 87
- Pre-operative use of hypnosis, 236
- Precipitancy
 of male, cause of frigidity, 111
 of urination, cause of, 314
 therapy of, 314
 case of, 314
- Precipitating factors, 157
 determination of, 138
 of epilepsy, 482
 for schizophrenia, 424
vs. basic etiology (case), 172
- Predisposition, 27
 to disease, 414
 to schizophrenia, 423
- Pregnancy, 25
 and emotion, 329
 followed by depressive swing, 400
 precipitating factor in schizophrenia, 424
 use of hypnosis, 236
 vomiting in, 95
 woman's attitude toward, 335
- Premature
 ejaculation, cause of frigidity, 113
 therapy of, 114
- Preoccupation in schizophrenia, 430
- Presenile dementia, 381, 393
 psychoses, 393
- Pressure of thoughts in agitated depression, 413
 on top of head, 341
- Preventing future breakdowns, 419
- Priapism, 30
- Pride
 cause of marital difficulties, 251
 necessity for maintaining, 76
 -wounding stress, 299
- Primitive
 expression of adults, 206
 of children, 206
 society, impulse succeeded by action in, 241
 thinking, 25. *See* Emotional thinking.
 during sleep, 151
 evidenced in dream form, 152
 expressed by identification, 77
 in the psychoses, 50
- Progestin, 334
- Prognosis and the curve of improvement, 259
- Prognosis as to life, 259
 classification, 260
 dependence on ability to shift responsibility, 264
 effect of coexisting physical disease, 278
 of duration of neurosis, 283
 hereditary element, 265
 of psychoneurotic patients, 259

- Prognosis, severe environmental stress, 283
 shock therapy, 449
 sudden onset, 269
- Progress
 source in dissatisfaction, 258
 in non-conformity, 247
 social, dependent on systematized effort, 258
 reasons for paucity, 194
 technical, reasons for, 194
- Projection, case of, 437
 definition of, 76
 example, 76
 in energy release, 254
 in schizophrenic patients, 77
 manifestations, 77
 mechanisms of, 425
 in chronic alcoholism, 118, 372
 in homosexuality, 119
 in paranoid schizophrenia, 25, 426
 originating in irradiation and convergence, 82
- Prophylactic psychiatry, 507
- Provincialism, expression of identification, 77
- Prudishness, case, 106
 cause of sex inhibition, 113
 examples, 106
- Pruritus, emotional basis of, 98
 secondary to erotic urge, 98
- Pseudo-appendicitis, 311
- Pseudopsychosis, result of sex concern, 96
- Psoriasis, effect of emotional disturbances, 99
 case of, 212
- Psychasthenic states, 29
- Psychiatric approach, relation to medical approach, 295
 workup, 344
- Psychiatric social worker, 525
- Psychic
 dependence on drugs, 466
 disturbances resulting from impaired hearing, 97
- Psychoanalysis and related schools, 527
- Psychoanalytic cures, 176, 528
- Psychobiologic
 attitude, reoriented by suggestion, 225
 orientation, creator of pent-up energy, 245
- Psychogenic
 cardiac death, 89
 vomiting, 245, 293
- Psychologic. *See* Mediating mechanisms.
 aspects, primary importance of, 125
 attitudes, definition of, 192
 importance for epileptics, 484
 in manic-depressive depression, 418
- Psychologic attitudes, inexactness of term, 192
 relation to relaxation, 249
 complaints, 56
 depression, 403. *See* Depression.
 influence on energy output, 286
 mechanisms, 56
 reactions, 45
- "Psychologic states," inexactness of term, 174
- Psychologic stimuli, relation to symptom site, 294
- Psychoneuroses, 27, 47, 366, 378, 403
 coexistence of manic-depressive depression, 282
 case of, 282
 effect on physiologic depression, 413
 heredity, 265
 opiates to be avoided, 238
 therapy of: finding and curing cause, 138, 261
- Psychoneurotic
 deafness, 334
 depression, 413. *See* Depression.
 obstacles in manic-depressive depression, 419
- patients, 22, 27, 28
 constructive energy, outlets for, 257
 energy expression of, 257
 excessive attachment to families, 203
 general attitudes of, 174
 guilt feelings of, 142
 inferiority feelings of, 142
 intolerance, 205
 need for moral support, 220
 ocular symptoms of, 321
 prognosis for, 259
 rarely committed, 342
 refusal to face facts, 208
 to recognize difficulties, 218
 self-condemnation, 142
 self-intolerance, 205
 symptom complex, 193
 tendency to continuous anger, 216
 to grudges, 216
 to overemphasize ailments, 130
 opinions of others, 217
 to regulate life by medicine, 228
 to repress painful memories, 147
 to vague desires, 206
 unwillingness to carry out line of action, 200
 to get well, 218
- reactions caused by financial stress, 171
 intensification of normal reactions, 202
 to reality, 342
 situations arising from bound energy, 242
 from self-accusation, 281

- Psychoncurotic symptoms, 30, 32, 36, 56
 innumerable, 295
 not imagined, 294
 therapy by hypnosis, 230
 Psychopathic personality, 25, 462, 503
 ability to control actions, 464
 adjustment of, 257
 swings (extreme), 287
 treatment, 394
 states, 462
 Psychoses, 23 *ff.*
 accompanying alcoholism, 370
 constitutional factors, 361
 degenerative, 356, 381
 diffuse damage of cortex, 355
 distinguished from neuroses, 342
 infectious, 356, 362
 in opium addicts (rare), 468
 in war, 502, 510
 neoplastic, 356, 396
 of the deaf, 211
 of feeble-minded, 490
 organic, 355
 origin in physiologic disturbances, 342
 relation to heredity, 400, 422
 toxic, 356, 370
 traumatic, 356, 394
 Psychotic patient
 clinical observation, 344
 death, 399
 energy expression of, 257
 need for institutionalization, 392
 philosophy of, 342
 resistant to hypnosis, 230
 psychopathic personalities, 464
 reactions, 287, 355, 462
 due to sexual frustrations (case), 118
 reasoning, inflexible, 145
 vs. normal, 287
 Psychotherapy, a cultivated art, 134, 359, 369, 376, 389, 449
 as reassurance, 418
 for alcoholism, 480
 for brain trauma, 280
 for family of manic-depressive patient, 419
 for manic-depressive depression, 418
 for peptic ulcer, 306
 for psychopathic personalities, 464
 for schizophrenia, 436
 for withdrawal symptoms, 470
 in shock therapy, 436, 449
 technique of, 178
 Puberty, 423
 precipitating factor in schizophrenia, 423
 Punishment unnecessary in handling psychopathic personalities, 463
 Pyknic, 399
 Pylorospasm, cause of stomach symptoms, 305
 produced by emotion, 95
 Pyromaniacs, 462
- ## Q
- QUALITIES essential in physician's personality, 186
 Quieting delirious patient, technique for, 380
 "Quivering inside," 307
- ## R
- RABIES, 369
 Rage
 effect on endocrine system, 85
 of psychotic psychopathic persons, 464
 psychopathic (case), 42
 Rambling speech in manic attacks, 145
 result of cortical injury, 145
 Rapport, 134, 179, 195
 factor in recovery rate, 290
 value in time saving, 141
 Rational
 planning, essential for relaxation, 249
 thinking leading to understanding, 193
 vs. emotional thinking, 193
 Rationalization, 51
 cases of, 76, 194
 common nature of, 76
 definition, 76
 evoked by criticism, 133
 in dreams, 151, 153
 in hypnosis, 151
 manifestation of intolerance, 205
 of emotional attitudes, 126
 of fixation, 83
 Raynaud's disease, case, 298
 Reaction
 patterns, 27
 aberrant, 55
 attempt to deal with situation, 60
 based on pleasure-seeking, 82
 determinants of, 54
 discussion of, with patient, 131
 establishment of, 48
 expression of psychologic entity, 55
 guided by experience, 49
 importance of cultural status, 54
 of economic situation, 54
 of criticism, 71, 72
 of infancy, 48
 of whole body, 99
 origin of, 22
 uncomplicated, 47
 Reading
 about accidents, 74

- Reading books on treatment, valueless
for patient, 178
disability, 489
to induce sleep, 340
- Reality
manic-depressive attitude toward,
342
schizophrenia, 342
- Realization
vs. anticipation, 83
- Reason
secondary nature of, 21
steps in, 197
1: ascertain and weigh facts, 197
2: analysis of possible solution, 198
3: resignation to difficulties, 198
4: determination to carry through
plan, 198
vs. worry, 197
- Reassurance, 297
case, 298
effect on patient, 225
for schizophrenic patient, 436
for therapy of menstrual delay, 330
case of, 330
importance of, in retraining, 188
of confidential nature of information
given, 142
value of, 130
- Recognition
desire for, in relation to martyrs, 78
to political leaders, 78
to temper tantrums, 78
meaningless in physiologic depres-
sion, 404
part of security, 46
quest for, 158
- Recovery
curve, steepness of, 290
facilitated by, 225
from manic-depressive depression,
effect of psychologic attitude, 419
rate, factors influencing, 290
relation to environmental stress,
270
relation to type of personality, 275
- Recreation, 298, 517, 524
case, 332
form immaterial, 253
means of relaxation, 298
release tension, 209
therapeutic use of institutions, 421
- Recurrence of symptoms
to be disregarded, 188
with renewal of stress, 260
- Red cells in blood stream, increased by
excitement, 88
- Reflex irritability, 300
- Refusal
to eat, case of, 437
in catatonic schizophrenia, 434
to face facts, case of, 79
dangers of, 208
- Refusal to face facts, result of with-
drawal, 72, 73
- Regression
causes, 81
definition, 81
following illness, 278
in schizophrenic patients, 81
temporary, 81
- Relation between emotion and symp-
tom, 307
of general to specific attitudes, 177
- Relative nature of stress, 170
case of, 172
of stupidity, example of, 489
- Relaxation, 62, 297
by recreation, 298
by socialization, 298
following coitus, 103
metrazol therapy, 300
in camps, 263
in therapy of peptic ulcer, 160
technique of achieving, 250
training psychologic attitude, 249
use of hypnosis, case, 316
for epileptic patient, 485
- Relaxed attitudes, 248
effect on energy mobilization, 247
part of mental hygiene, 435, 497
tension releasing, 250
- Relaxing muscular system by hypnosis,
250
- Religion
as moral support, 220
questions relative to, 144
- Religious
conversions: temporary value of, 263
inhibitions, 55
resulting in indecision, 62
taboos, case, 437
- Remissions in shock treatment, 285,
289
- Remorse, skin symptoms, 316
- Removal
from stress (children's problems), 260
case, 160
of bases of future breakdowns, 144
of cause (in epilepsy), 483
of general attitudes (by retraining),
136
of immature attitudes, 192
of intellectual objections, 308
of irritating memories, 177
situation, 260
of patient from stress, 158
of psychoneurotic obstacles, 419
of stress, 129
cases, 160, 322
of tension (in therapy of insomnia),
339
of unhygienic traits, 295
- Reorientation
of organism, 174
of patient's attitude, 158

- Repression
 dangers of, 252
 definition, 68
 examples of, 68, 69
 in dreams, 154
 of irritating memories, hinderance in
 analysis, 144
 tendency of psychoneurotic pa-
 tients, 147
 relation to intensity, 207
 resulting in hypochondriacal phe-
 nomena, 253
 in nagging, 253
 in tension, 251
 vs. expression, 252
 Resentment, 203, 214, 216, 488
 case of, 79
 Resignation, value of, 198
 Resistance
 to hypnosis, 234
 to suggestion, 227
 Respiratory
 centers, irritability of, 300
 disturbances, 30, 300
 system, effect of emotion on, 89
 Response
 of patient (suggestion), 227
 part of security, 46
 quest for, 158
 to pain, 343
 Responsibility, ability to bear, 220
 removal of, from psychopathic per-
 sonalities, 463
 Rest homes for cases of brain damage,
 280
 of senility, 165
 Restlessness in agitated depression, 413
 of delirium, ineffectiveness of medi-
 cation, 378
 therapy of, 380
 result of idleness, 299
 skin symptoms, 316
 Restraint
 in civilized life, 242
 to be avoided, 248
 in delirium, 380
 in metrazol therapy, 451
 Restaurant phobia, case, 215
 Restrictions imposed by civilization,
 220
 Resynthesis
 of attitudes and reaction patterns,
 necessity for, 127, 295
 principles of, 129
 of personality, 157
 Retardation of thought in depression,
 281
 Retention, 30
 of feces in agitated depression, 413
 in catatonic schizophrenia, 434
 of urine in catatonic schizophrenia,
 434
 in hysteria, 40
 Retention, post-operative, 316
 Retraining
 basic, in therapy of general attitudes,
 136, 176, 178
 effect on blood pressure, 299
 most important part of therapy, 129
 not always possible, 129
 to react automatically in hygienic
 manner, 178
 "Retreats," temporary, 264
 value of, 262
 Retrospective falsification, 266
 case of, 266
 Revenge
 desire for, expressed by negativism,
 75
 immature reaction, 71
 Rhinorrhea in tension states, 325
 seasonal influence, 326
 Rigid
 personality, 214, 267, 319
 in manic-depressive psychosis,
 419
 rules, avoidance of part of mental
 hygiene, 435
 Rigidity in grand mal seizure, 482
 of ethical codes, 216
 of ideas, 216
 Ringing in ear, 323
 Roaring sounds, 323
 Roberts, S. R., 90
 Robots compared to man, 215
 demand for, in mechanized civiliza-
 tion, 256
 Romantic ideals, 110
 Routine
 dangers of, 215
 value in therapy of acute manic and
 depressive phases, 418
 of insomnia, 336
 value of, 215
 work, monotony of, 256
 Rut formation, 198
 thinking, dangers of, 198
 hinderance in analysis, 144
 Rutherford, C. W., 97
 SADISM, 100, 118, 496
 case, 171
 compensatory, 133
 due to early conditioning, 118
 in outwardly sweet persons, 252
 outgrowth of excessive politeness,
 252
 Sadistic
 personalities, 462
 expression of inferiority feelings
 (epileptics), 484
 Sakel, Manfred, 441
 Salivation, 85, 94

- Satisfaction
 blocked by environment, 242
 delayed, 45
 for primitive man, 45
- Satyriasis, 118
- Scape goat as energy release, 255
- Schilder's disease, 24, 355, 393
- Schizophrenia, 24, 361, 367, 378, 421, 503
 cases, 266, 427
 blood pressure, 449
 death in (from T.B.), 399
 from disturbances in central autonomic system, 342
 therapy of, 435. *See* Insulin and Metrazol shock therapy.
- Schizophrenic
 attitude toward reality, 342
 patient
 indications of turmoil, 143
 life history of, 423
 physique of, 422
 tendency to day dream, 79
 unwillingness to bear responsibility, 221
 reaction pattern (examples), 60
 symptoms, importance of early recognition, 435
 in organic psychosis, 361
 symptoms, 425
- School program, 498
 situation, 132
- Schultz, J. H., 98
- Schwartz, O., 95
- Seasonal effect on manic-depressive psychosis, case, 415
- Seclusiveness, case, 190
 vicious cycle, 253
 withdrawal, 175
- Security, enlarged meaning of, 46
 for primitive man, 45, 158
- Sedatives
 in psychoses, 378, 381, 421
 method of giving, 236
 restricted use of, 237
 suggestive value of, 236
 therapy of abstinence symptoms, 470
 of idiopathic epilepsy, 483
 of over-sex, 169
 value of alternating, 236
- SeEVERS, M. H., on drug addiction, 467
- Self-
 abuse (inferiority), 216
 accusation, relief of through understanding, 417
 assertion, desire for, expressed in negativism, 75
 awareness, 65
 blame, 66
 case, 406
 causes of, 65
 examples of, 66, 67
 confidence, 63, 205
- Self-consciousness, 65
 control, necessity for, 252
 psychopathic (case), 464
 discipline based on will power, 267
 bases of, 220
 definitions of, 122, 220
 in sex, 122
 part of mental hygiene, 435
vs. asceticism, 220
 expression, 158
 indulgence, 220
 factor in prognosis, 259
 intolerance, cause of tension, 248
 to be avoided, 220
 pity, result of resentment, 80
 preservation for primitive man, 45
 in civilized society, 100
 reflexive nature of anger, 251
 reliance, effect on, of over-attention 203
 goal of psychotherapy, 265
 impossibility of achieving complete, 204
 need for, 220
 possible through freedom, 204
 teaching of, 192
 respect, restoration of, for epileptic patient, 485
 suffering, 220
 sympathy, 266
 tolerance, 204
 characteristic of maturity, 205
 essential for relaxation, 249
 training (case), 162
- Selfishness, cause of marital difficulties, 165
- Setbacks, inevitable, 285
- "Second childhood," 81
- Senile
 degeneration, 23
 dementia, 381
 therapy of, 384
 disturbances, therapy by changing environmental pressure, 280
- Senility
 brain damage in, 259
 injury to cortex, 145
 relation to schizophrenia, 424
 value of discussion with relatives, 164
 of rest homes for, 165
- Sense of sin, case, 472
- Sensitivity
 determinant of stress, 269
 expressions of, 63
 hypersensitivity in schizophrenia, 422
- Sensitization tests, 319
- Septicemia, psychoses, 379
- Sex. *See* Frigidity, Impotence, Masturbation, Homosexuality, Masochism, Sadism.
 concern resulting in amenorrhea, 96
 in *grosseesse nerveuse*, 96

- Sex, concern resulting in pseudosycesis, 96
 desires, decrease of, in physiologic depression, 404
 expressed in dreams, 153
 in relation to menstruation, 333
 varying degrees of, 104
 difficulties, 103, 104, 284
 case, 272
 drives, 100
 enlarged meaning of, 46
 excitement, value of, 104
 false ideas and ideals about, 273
 frustration, cases, 115, 273
 creator of energy, 121
 due to differences in sex tempo, 167
 physical deformity (case), 115
 therapy of, 121
 importance of, overestimated by Freud, 526
 in aged, 390
 information, amount to be given
 children, 101
 value of specific, 169
 perversions, 25
 play, tension builder, 105
 therapy of impotence, 114
 relations before marriage, 102
 satisfaction essential to successful marriage, 104
 symbolism in dreams, 153
 taboo, 55
 case, 437
 technique, 167
 case, 167
 tempo, 167
 trauma, 107
 cases, 107, 119
 resulting in homosexuality, 119
 in sadism, 118
- Sexual
 anesthesia, 111
 ignorance, 103
 maladjustments, 270
 case, 271
 cause of marital difficulties, 165
 in relation to menstrual difficulties, 333
 origin of, 55
 primary stress, 100
 relation to prognosis, 259
 relative nature of, 104, 105
 resulting from ignorance or taboos, 104
 from sex trauma, 107
 therapy of, 273
 problems in feeble-mindedness, 490
 physician's attitude toward, 104
 psychopaths, 462, 487
 tension released through non-sexual channels, 270
 case of, 273
- Shallow respiration in apprehensive states, 91
 Shell shock, 502, 512
 Sherman, Irene, 85
 Shifting responsibility, prognostic significance of, 264
 Shock therapy, 441. *See* Insulin therapy and convulsive therapy.
 of aged, 392
 Shooting pains in physiologic depression, 405
 Shoplifters, 467
 Short-term therapy, 141, 144
 disadvantages of, 129
 ineffectiveness of (case), 261
 value of, 129
 case, 139, 305
 Shyness, 63, 141, 269, 360
 in pre-schizophrenic personality, 423
 Sighs, 30, 300
 explanation of, 300
 produced by tension, 91
 Silent ulcer, 306
 Single symptoms, rarity of, 193
 Sinking feeling in anxiety attacks, 32
 Sinusitis psychically conditioned, 91
 Site
 of lesion in manic-depressive swings, 372
 of neurosis, accidental determination of, 323
- Skin
 as affected by emotion, 98, 318
 oversensitive to cold, 98
 elements, involvement of, 316
 sensation, variety of complaints, 318
 sensibility, symbolic process, 318
 symptoms as first indication of disease, 318
 resulting from anger, 316
 from discontent, 316
 from driving ambition, 316
 from rigidity, 317
 therapy of, 317
 cases, 319
- Skull trauma, effect on alcohol tolerance, 394, 472
 Sleep. *See* Insomnia.
 difficulties, 337
 case, 331
 in depression, 405
 in schizophrenia, 425
 importance in therapy of delirium, 380
 producing drugs, difficulty in finding for manic-depressive patient, 421
 therapy, 436
 Slips of tongue, 130
 Smooth muscle
 spasm decreased by suggestion, 225
 tenseness of, 294
 Snorting, 300

- Social**
 activity, cases, 305, 308
 influence on energy output, 286
 to be urged, 253
 value to schizophrenic patient, 437
 approval, 54
 control, importance and value of, 217
 customs disregarded by morphine addict, 468
 estrangement as stress, 211
 forces, effect depending on individual constitution, 124
 on nature of pressure, 125
 importance in formation of personality, 124
 order, demands of, 208
 pressures during formative years, 125
 existent at onset of illness, 125
 at time of consultation, 125
 source of, 217
 technique for determining, 125
 prohibitions in regard to sex, 100
 progress, 258
 psychiatry, 496
 situation, paradoxical role in relation to energy, 243
 stress, normal, *vs.* neurotic reaction to, 127
 relative nature of, 127
 structure dependent on cortex, 343
 therapy for manic-depressive psychosis, 419
Socialization, 253, 298
 as means of relaxation, 298
 case, 312
 of community, 500
Society
 responsible for channeling energy, 258
 source of inhibition, 243
 of stimulating energy, 243
Society's
 discipline, 220
 failure to care for psychopathic personalities, 463
 obligation to furnish energy outlets, 255
Sodium
 amyltal in prognosis, 450
 in therapy of delirium, 381
 of manic-depressive depression, 421
 narco-analysis, 519
 bromide, 377
 diphenylhydantionate, use of, in epilepsy, 484
Spasm of abdominal muscles, 304
 of bile duct, 304
 of colon, 95
 of intestines, 95, 294
 of muscles of esophagus, 301
 of larynx, 301
 of pyloric sphincters of stomach, 22
 Spasm of respiratory muscles in grand mal seizures, 482
Spasmogenic aptitude, 90
Spastic
 colitis. *See* Colitis.
 constipation, expression of emotional disturbance, 95
 in depression, 414
 of physiologic or psychologic origin, 292
 paraplegia, 488
 Speaking to self (case), 437
Special sense organs, 96
 senses affected in hysteria, 36
Specific
 advice, 196
 attitudes. *See* Attitudes.
 instructions, necessity for, 196
 reaction patterns to be dissected, 131
Spermatorrhea, result of psychologic difficulties, 96
Split personality, result of dissociation, 80. *See* Schizophrenia.
Spontaneous
 comments of friends, prognostic significance of, 187
 energy, definition of, 247, 500
 need for release, 247
 erections, 102
 history given by patient, 140
 value of, 143
 recovery common in manic depressive psychoses, 400
 remission of manic phase, 403
Stages in development, Freudian concept, 526
 of hypnosis, 233
Stammering, 30
 expression of tension, 40
 habitual nature of, 283
 in hysteria, 40
Stereotypy in catatonic schizophrenia, 434
Stomach and intestines, relation to brain, 304
 contractions, relation to cortex, 359
 quivering, case, 308
 symptoms, explanation of, 308
Storch, A., 50
Strabismus, case, 160
Stream of speech, 348
Stress, 27
 actual, 157, 504
 advice on how to deal with, 128
 artificial, 173
 as infringement on ideals, 173
 determined by attitude, 158
 determining severity of, 128
 ego wounding, 298
 factor in reaction pattern, 138
 identical (apparently), 294
 in modern civilization, 158
 influence on psychopathic states, 462

- Stress, necessity for dealing with, 157
 physical, 497
 precipitating factor in functional disorders, 294
 relation to attitude, 157, 165
 relative nature of, 125, 130, 170
 cases, 125, 157
 relieving of, in therapy of headache, 341
 removal of, 123, 128, 158, 264
 case, 160
 of patient from, 128, 160
 case, 160
 resultant from variable forces, 173
 severity of (in relation to sensitivity), 269
 subtle, 299
 tension-producing, 160
 therapy of, 160
 treated by discussion with relatives, 164
 types:
 1. environmental on mentally retarded, 163
 prognostic significance of severity of, 283
 2. financial, cause of antisocial reactions, 171
 of chronic dissatisfaction, 171
 of emotional outbreaks, 170
 of ill-tempered parents, 170
 of psychoneurotic reactions, 171
 3. matrimonial, 165
 4. of physical illness, cases, 162, 209
 therapy of, 160
 varying in symptoms from, 292
 Striving, cause of tension, 275
 value of, 275
 Structure and meaning of psychoanalysis, 526
 Study habits, value of early inculcation, 256
 Stupor in catatonic schizophrenia, 434
 Stuttering, 30
 expression of tension, 40
 in hysteria, 40
 treated by hypnosis, 236
 Subconscious, 72
 Subcortical hemorrhages, 355, 395
 Sublimation, 189, 245, 252
 definition, 83
 of anger, 252
 of sex frustration, 121
 social value of, 84
 use of, 165
 when vocalization is not possible, 252
 Sugar metabolism, role in the psychoses, 86
 Suggestibility, heightened by hypnosis, 233
 Suggestion, 137, 222
 aid in retraining attitudes, 225
 case, 312
 created by atmosphere of hospital, 226
 susceptibility of epileptic patients to, 484
 temporary nature of, 222
 case, 261
 use of, 131
 placebos, 228
 used in therapy of over-sex, 169
 to decrease emotional tone, 225
 hypertension, 225
 smooth muscle spasm, 225
 to raise threshold of pain, 225
 to reorient psychobiologic attitudes, 225
 value of, 223
 dependent on sincerity of physician, 226
 varying effect of, 227
 Suggestive value of sedatives, 236. *See* Hypnosis.
 Suicide
 in depression, 405
 intensity of, in agitated depression, 413
 resulting from being urged "to use will power," 406
 from condemnation, 268
 from inability to gain recognition, 78
 tendency to, 276
 therapy for, by metrazol, 414
 threats not to be ignored, 420
 value of institutional therapy, 420
 Super-ego, 528 (Appendix)
 Superiority complex in manic phase, 402
 Superstition, 49
 Suspicion, 27
 Suspiciousness, 25, 361, 372, 425
 of the deaf, 97
 resulting from sex frustration, 115
 Sweat glands, 316
 secretion, 97
 Swings
 affected by disease process, 288
 duration of, 290
 extreme in manic-depressive psychoses, 287
 in psychopathic personalities, 287
 inherent nature of, 287
 physiologically determined, 287
 relative independence from psychologic factors, 287
 Symbolic
 activity expressed in spasm, 37
 expression (case), 335
 gestures in schizophrenia, 433
 process reflected in skin sensitivity, 318

- Symbolic symptoms, 35, 509
 type of personality, 277
- Symbolism, 30
 expression of neurotic symptom, 123
 in dreams, 153
- Symbolization
 dangers of, 50
 definition, 49, 50
- Sympathetic
 explanation, necessity for, 179
 listener, value of, 528
 nerve supply in abdominal viscera, 304
- Sympathy
 expression of identification, 78
 seeking, case, 312
- Symptom
 definition of, 292
 disappearance, 295
 in physiologic depression, 405
 location determined by constitutional predisposition, 293
 by psychologic stimuli, 294
 necessity for healing, 236
 realization of unimportance of, 528
 reasons for disregarding, 294
 recurrence after hypnosis, 233
 inevitable, 219
 to be disregarded, 188
 reiteration of, by patient, 144
 relief of, 144
 removal, 262
 self-perpetuation of, 283
 significance of, to be explained, 219, 227
 therapy, cases showing ineffectiveness of, 327, 338
 unimportance (examples), 415
- Symptom
 complexes, cases, 312, 323
 part of vicious cycle, 343
 presented by psychoneurotic patient, 193
- Symptomatic
 therapy, inadequacy of, 101
- Symptoms
 date of onset, 140
 death as end-result, 259
 formula for ($S = S \times E \times \text{Inh. C.}$), 185
 innumerable, 295
 of agitated depression, 413
 of drug withdrawal, 469
 of feeble-mindedness, 486
 of frustration (case), 112
 of intellectual defect, 351, 357
 of organic psychoses, 355
 of physiologic depression, 404
 of psychoneurotic depression, 403
 of psychopathic personality, 462
 of schizophrenia, 421
 rarity of simple, 193
 symbolic, 35, 284
- Symptoms, treated by sedatives, 236
 uselessness of treatment, 183
 variety of, from same stress, 293
- Syphilis, cause of epilepsy, 480
 of feeble-mindedness, 488
 of spinal cord (cause of impotence), 110
- Syringomyelia, 318
- Systematized delusions in paranoid schizophrenia, 434
- ## T
- TACHYCARDIA, 31, 56, 275, 295
 associated with worry, 196
 case, 298
 caused by fear and hate, 71
 expression of tension, 248
 habitual nature of, 283
 in "vagotonic" persons, 298
 paroxysmal, 298
 pathology of poorly understood, 298
 produced by a neurosis, 89
 relation to tension, 298
 result of bound energy, 243
 usual accompaniment of palpitation, 297
- Tact (physician's), 224
- Talking to one's self, 425
- Teaching, 498
- Technique of changing attitudes, 178
 case, 183
 of curing neurotic symptoms, 174
 of hypnosis, example of, 232
 of interviewing patients, 141
 of putting patients at ease, 141
 of psychoanalysis, 528
- Temper
 outbursts, case, 213
 in epilepsy, 484
 in psychopathic states, 463
 in schizophrenia, 426
 tantrums, cause, 78
 infantile level, 83
- Temperamental differences, cause of marital difficulties, 165
- Temperamentalism, 399
- Tension, 30
 and heat dissipation, 317
 as mediating mechanism, 294
 associated with making decisions, 61
 cause of insomnia, 337, 338
 of psychologic complaints, 56
 of short respiration, 300
 created by social inhibition, 82
 by excessive will power, 268
 by unreleased energy, 82
 depression, 276
 case of, 315
 determined by attitude, 83, 158
 developed in early environment, 52
 diminishment of, 298

- Tension, ear symptoms of, 323
 effect on defecation, 309
 on function of bladder, 95
 expressed on nephrolithiasis, 96
 in neurotic symptoms, 123
 in sighs, 91
 from grudge bearing, 248
 from guilt feeling, 248
 from inhibitions, 242
 from self-intolerance, 248
 from unreleased energy, 244
 from unsolved conflicts, 248
 kinds of, 22
 manifested by extrasystoles, 297
 in headaches, 96
 in tachycardia, 298
 mechanism to be understood by patient, 249
 multifarious sources of, 248
 nature of, 248, 294
 neuroses (resulting from boredom), 255
 not released by physical activity, 254
 by routine work, 256
 of respiratory muscles (stammering), 40
 of speech muscles, 31
 of striated muscles, 30
 of tongue (stammering), 40
 permeation of atmosphere of, 162
 produced by environmental pressure (case), 169
 by having too many ambitions, 250
 by incomplete sex satisfaction, 105
 by repression, 251
 by withdrawal, 167
 reduced by reduction of desires, 250
 by vocalization, 251
 release by relaxed attitude, 250
 through games, 253
 through hobbies, 253
 through music, 254
 through recreational activity, 209
 through social activities, 253
 through talk, 528
 removal of (case), 303
 result of unreleased energy, 240
 in increased activity of endocrine system, 294
 of nervous system, 294
 of vegetative system, 294
 rise of, through unexpended energy, 242
 sex, 96, 102
 symptoms of, 30, 495, 508
 of mobilized energy, 240
 tendency to be widespread, 318
 temporary lessening of (case), 261
 tendency to increase physical pain, 180
 type of personality, 275
 Tests for determining mental age, 487
- Thalamus
 emotional seat, 360
 Head's findings, 417
 impairment of function, 25, 360
 probable integrating center of emotion, 359
 role in manic-depressive swings, 417
- Theatrical appearance, 431
- Theelin, over-use of, 334
- Therapy. *See* Psychotherapy.
 essential elements, 192
 individualized nature of, 192
 made difficult by overtraining, 298
 of abstinence symptoms, 469
 of alcoholism, 471
 hinderances to, 474
 of attitudes, 178
 of blushing, 318
 of children, 161
 of chronic deliria, 379
 of colitis, 311
 of drug addiction, 469
 of emotional thinking, 194
 of environmental stress, 174
 of epilepsy, 483, 484
 of epileptic personality, 483
 case, 485
 of excitement, 485
 of family (case), 389, 437
 of feeble-mindedness, 488
 of feeble-minded children, 490
 of general habits, 192
 reaction patterns, 176
 of headache, 341
 of hypertension, 299
 of insomnia, 339
 of manic-depressive swings, 417
 of menstrual symptoms, 334
 of pallor, 318
 of parents, 160
 of physiologic factors, 174
 of psychoneuroses, 157
 of psychopathic personalities, 463
 of resentment, 216
 of schizophrenia, 435
 of sex frustration, 121
 maladjustments, 273
 of skin conditions, 319
 of stress, 158 *ff.*
 of symptoms in psychoneurotic depression, 414
 of war neuroses, 505
 psychoanalytic, 526
 through family (case), 303
- Thermal
 intolerance in physiologic depression, 405
 sensations, 317
 therapy of, 317
 "They do not appear neurotic," 276
- Thinking
 about difficulties, 24, 296

- Thinking process, 144, 351, 357
 "Thinking of nothing," 68
 "Threshold of pain" raised by suggestion, 225
 Throbbing in ear, 323
 Thyrotoxicosis, relation to schizophrenia, 424
 Tickling in ear, 323
 Tics, 300
 Tight band about the head, 341
 Tightness of stomach, 305
 Time
 essential for development of habits, 136
 importance in development of unemotional handling of situations, 209
 in retraining, 129
 limitations, how to overcome, 141
 necessity for, in making changes, 179
 needed for psychoanalysis, 526
 required for analysis, 138
 for cure dependent on cooperation, 227
 therapeutic value of, 284
 to be allowed for interview, 141
 value of, in cure of depression, 282
 Tingling in arms in physiologic depression, 405
 Tiredness of eyes, 321
 Tolerance, 205
 aided by financial security, 171
 development of (case), 212
 of common limitations, 206
 of individual limitations, 206
 part of mental hygiene, 435
 "Tout comprendre, c'est tout pardonner," 205
 Torticollis, 37
 cured by hypnosis, 230
 case, 232
 "Total-push" therapy, 513
 Toxemia, cause of psychoses, 356, 370
 Toxic
 condition, cause of cortical stimulation, 152
 factors in psychoses, 356
 insomnia, medication for, 337
 involvement of brain following children's diseases, 481
 psychoses, emergence of underlying personality, 360
 injury to cortex, 145
 symptoms, result of medication of epilepsy, 484
 Toxins, cause of epilepsy, 480
 cause of feeble-mindedness, 488
 Trauma
 cause of psychoses, 357, 394
 Traumatic neuroses, 395
 Trembling, 308, 494
 Tryparsamide in therapy of paresis, 368
 Tube feedings in schizophrenia, 434
 Tuberculosis, death from, in drug addicts, 469
 in schizophrenia, 399, 455
 Tubular vision, 321
 due to hysteria, 39, 97
 result of conversion, 75
 Tumor of spinal cord, cause of impotence, 110
 Tumors of brain, 396
 Typhoid fever psychoses, 379
 Tyrannical parents, case, 331
- ### U
- Ucs. *See* Unconscious.
 Ulcers, stomach, 306
 Unawareness of visual defect, reasons for, 320
 Unconscious (The)
 definition, 72
 meaning of, 126
 "Unconscious" irritation, example of, 127
 Unconscious
 memories, 177
 case, 132
 mind, 68
 repression, hinderance in analysis, 138
 Uncooperative mate, 273
 Underlying personality, emergence in psychoses, 360
 importance of, 342
 Understanding
 ability of, to remove fear, 210
 aid in gaining cooperation, 479
 conditioned on rational thinking, 194
 effect on desire, 207
 meaning of, 207
 necessary in treatment of psychopathic personalities, 463
 of attitudes, value of, 132
 of nature of illness, effect on self-accusation, 417
 value to epileptic patient, 485
 of role of emotion, 335
 of symptoms, 219
 only cure for intolerance, 207
 vs. passive acceptance, 207
 Unhappiness, result of idleness, 299
 Unhygienic attitude, necessity of discarding, 133
 necessity of understanding, 133
 Unmarried persons, sex problems of, 270
 Unrest (intense) in psychopathic personality, 463
 Unsatisfied sex desire, case of, 167
 Unsolved problems cause of fear, 56
 Unwillingness
 to bear responsibility (schizophrenia), 221

- Unwillingness to carry out plans (psychoneurotic patients), 200
 to face facts, 260
 case, 212
 problems, 278
 Uremia and alcohol, 480
 Urgency
 of urination, 30
 of actual problems, case, 172
 Urging
 avoidance during acute phases of
 manic-depressive psychoses, 418
 in therapy of schizophrenia, 436
 Urinary retention resulting from bound
 energy, 243
 Urination, frequency of, 30, 32, 314
 in grand mal seizures, 482
 Urticaria resulting from emotional dis-
 turbance, 98, 316, 319
 Uterine contractions during orgasm,
 103
- VACATIONS, value of, 260
 Vacillation
 arising from "bickering" home, 175
 caused by overemphasis on opinion
 of others, 217
 degree determined by strength of
 conflict, 145
 Vagabonds, 393
 Vaginal
 bleeding (case), 259
 cramps caused by emotional difficul-
 ties, 334
 secretion during orgasm, 103
 "Vagotonic" persons, 298
 Vagotonic symptoms, 32
 Variations
 in epileptic attacks (case), 485
 in symptoms, constitutional differ-
 ence, 293
 organ subject to initial physical
 disturbance, 293
 physical dysfunction symbolic of
 emotional problem, 293
 Vascular tension, disappearance of, 300
 Vasodilation, 318
 Vasomotor resonance, effect on head-
 ache, 341
 spasm, 318
 Vegetative system, increased activity
 under tension, 294
 response of, in worry, 298
 Vertigo (case), 269
 Vicarious
 reactions in depressive period, 417
 to conflicts (psychopathic person),
 462
 release (case), 326
 Vicious traits in feeble-minded, caused
 by criticism, 490
 Viciousness, relation to poverty, 464
 Violation of moral code not induced by
 hypnosis, 235
 Violence (physical) in schizophrenia,
 425
 Vision blurring (case), 312
 disturbances, 30
 Visual
 acuity, changes in (case), 321
 commonness of changes, 321
 difficulty in determining, 321
 of children, 321
 therapy of, 321
 amblyopia, 322
 defect, unawareness of, 97, 320
 difficulties, necessity for careful diag-
 nosis, 320
 for neurologic examination, 320
 hysteria, 39
 symptoms following metrazol ther-
 apy, 386
 Vitamin B in therapy of alcoholism, 374
 Vitamins
 in therapy of delirium, 374, 375, 379
 Vocalization
 in marriage, 251
 not always feasible, 252
 possible, 252
 tension releasing, 250
 Vocations, 246
 Voluntary muscle, habitual action of,
 301
 involved in tics, 300
 Vomiting, 30
 case, 259
 during pregnancy, 335
 by persons not pregnant, 335
 understanding role of emotions,
 335
 use of hypnosis for, 336
 expression of tension, 248
 result of emotional disturbance, 95
 Von Meduna experiments with metra-
 zol, 450
 Von Wyss, W. H., 89
- W
- WAKING ideas vs. dream ideas, 150
 War neuroses, 493
 Warm
 baths in therapy of acute abstinence
 symptoms, 470
 of insomnia, 340
 sedative value of, 381
 hands, 316
 Warts, 316
 cured by suggestion, 99
 Waxy flexibility, 25
 in catatonic schizophrenia, 434
 Weakness of legs (case), 170

- Weather
 changes, effect on epileptic attacks, 482
 effect on rhinorrhea, 326
- Welcoming pain in manic-depressive depression, 417
- Werley, G., 89
- "Wet" brain, 372, 373, 375
- What others think, 217
 overemphasized by psychoneurotic patients, 218
- White blood count as affected by emotion, 88
- Will power, 267
 in self-discipline, 267
 measure of, 268
 not always effective, 267
 of no value in physiologic depression, 417
 prognostic significance of, 267
- Wish
 fulfilment in dreams, 150
 to be cured, importance of, in therapy of alcoholism, 480
 to be ill, 218
 to change (patient's), essential, 195
 value of, 187, 219
- Wishes (and fears), basis of worry, 196
- Wishing the impossible
 cause of marital difficulties, 165
 futility of, 208
 to have one's own way, 165
- Withdrawal, 27, 72
 as a compensatory mechanism, 84
 cases, 73, 74
 caused by critical attitude of physician, 133
 causes of, 72, 73
 coitus interruptus, 117
 cases, 117, 273
 effects, 73
 from reality (in schizophrenia), 426
 of child, 175
 physical, 73
 psychologic, 73
 therapy, danger of death, 470
 of alcohol, 479
- Withdrawal, therapy, of drugs, symptoms, 467, 470
 type of personality prone to, 74
- Wittiness, 361, 401
- Woodyatt, Rollin T., 87
- Work
 activity, value to schizophrenic patient, 457
 as energy release, 255, 501
 efforts, value of habit, 256
 habits, early inculcation of, 245
 therapy for manic-depressive psychoses, 397, 420
 unpleasant aspects of, 255
 value of, 256
 vs. drudgery, 256
 "Wooing sleep," 340
- Worry, 30, 79, 196
 a relative term, 208
 as a kind of emotional thinking, 196
 avoidance of, 297
 based on lack of emotional emancipation, 200
 on wishes and fears, 196
 cases, 297, 312
 caused by lack of courage to face facts, 79
 common tendency, 197
 definition, 196
 dismissal of, 296
 expressed by increased response of vegetative system, 298
 by sense of inferiority, 197
 in physiologic depression, 404
 "normal," 197
 result of emotion, 79
 of phantasy, 79
 types of, 197
 vs. reasoning, 197
 "Worrying inwardly," 298
- Y
- YAWNING (case), 112
 in drug withdrawal, 469
 "You must relax," 62

